

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representation of  
The original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**

# SEARCH REQUEST FORM

Access DB# 2087

Scientific and Technical Information Center

Requester's Full Name: Frank Choi Examiner #: 76753 Date: 7/17/00  
 Art Unit: 1616 Phone Number 30 8 0067 Serial Number: 091373552  
 Mail Box and Bldg/Room Location: CM1 2D19 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

\*\*\*\*\*  
 Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Dosage form comprising self-destructive Manbrane  
 Inventors (please provide full names): David Emil Edgren, Robert R. Skluzacek  
Shu Li, Patrick S.L. Wong, Paul R. Magruder  
 Earliest Priority Filing Date: 11/4/98

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

*Search claims 1-20*

*If too broad, when gene terms are use members of Markush groups*

RECEIVED

Point of Contact:  
 John Dantzman  
 Technical Info. Specialist  
 CM1 TEO5 Tel: 300-4433

BEST AVAILABLE COPY

## STAFF USE ONLY

Searcher: JOHN DANTZMAN Type of Search: NA Sequence (#) AA Sequence (#) Structure (#) Bibliographic Other  
 Searcher Phone #: \_\_\_\_\_ Vendors and cost where applicable: STN Dialog Questel/Orbit Dr. Link Lexis/Nexis Sequence Systems WWW/Internet Other (specify)  
 Searcher Location: \_\_\_\_\_  
 Date Searcher Picked Up: 7-21-00  
 Date Completed: 7-24-00  
 Prep & Review: \_\_\_\_\_

L22 ANSWER 4 OF 36 CAPLUS COPYRIGHT 2000 ACS  
 ACCESSION NUMBER: 1999:193984 CAPLUS  
 DOCUMENT NUMBER: 130:227749  
 TITLE: Sustained-release pharmaceutical tablets comprising  
 polymers, surfactant  
 INVENTOR(S): Skluzacek, Robert R.; Edgren, David E.  
 PATENT ASSIGNEE(S): Alza Corporation, USA  
 SOURCE: PCT Int. Appl., 48 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 INT. PATENT CLASSIF.:  
 MAIN: A61K009-44  
 CLASSIFICATION: 63-6 (Pharmaceuticals)  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9912527	A2	19990318	WO 1998-US18555	19980904
WO 9912527	A3	19990610		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG AU 9892230 A1 19990329 AU 1998-92230 19980904 PRIORITY APPLN. INFO.: US 1997-58323 19970909 WO 1998-US18555 19980904				

ABSTRACT:  
 A dosage form is disclosed comprising means for delivering essentially a total dose of drug. The dosage form comprises a polymer, a plasticizer, a surfactant, and a binder. Sustained-release pharmaceutical tablets comprising nifedipine, hydroxypropyl cellulose, polyethylene oxide, and polyoxyethylene sorbitan tristearate were prepd. The drug release performance of the tablets were studied.

SUPPL. TERM: sustained release pharmaceutical tablet polymer surfactant;  
 nifedipine hydroxypropyl cellulose sustained release  
 tablet;

INDEX TERM: polyoxyethylene sorbitan tristearate sustained release  
 tablet  
 Plasticizers  
 Surfactants  
 Sustained release tablets (drug delivery systems)  
 (sustained-release pharmaceutical tablets comprising  
 polymers, surfactant)

INDEX TERM: Polymers, biological studies  
 Polyoxyalkylenes, biological studies  
 ROLE: THU (Therapeutic use); BIOL (Biological study); USES  
 (Uses)  
 (sustained-release pharmaceutical tablets comprising  
 polymers, surfactant)

INDEX TERM:

9004-35-7, Cellulose acetate 9004-64-2,  
Hydroxypropyl cellulose 9005-67-8, Polyoxyethylene  
sorbitan monostearate 9005-71-4, Polyoxyethylene sorbitan  
tristearate 21829-25-4, Nifedipine 25322-68-3,  
Polyethylene oxide  
ROLE: THU (Therapeutic use); BIOL (Biological study); USES  
(Uses)  
(sustained-release pharmaceutical tablets comprising  
polymers, surfactant)

L12 ANSWER 15 OF 18 CAPLUS COPYRIGHT 2000 ACS  
 ACCESSION NUMBER: 1992:201112 CAPLUS  
 DOCUMENT NUMBER: 116:201112  
 TITLE: Polyalkylene oxide-amino acid copolymers as drug carriers and charged copolymers based thereon  
 INVENTOR(S): Zalipsky, Samuel; Bolikal, Durgadas; Nathan, Aruna; Kohn, Joachim Benjamin  
 PATENT ASSIGNEE(S): Enzon, Inc., USA  
 SOURCE: PCT Int. Appl., 97 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 INT. PATENT CLASSIF.: A61K031-765  
 CLASSIFICATION: 63-6 (Pharmaceuticals)  
 Section cross-reference(s): 9  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
WO 9200748	A1	19920123	WO 1991-US4797	19910708	
W: AU, CA, HU, JP, SU					
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE					
JP 05508879	T2	19931209	JP 1991-512668	19910708	
PRIORITY APPLN. INFO.:				US 1990-549494	19900706
				US 1991-726301	19910705
				WO 1991-US4797	19910708

ABSTRACT:  
 Copolymers of polyalkylene oxides and amino acids or **peptide** sequences are disclosed, which amino acids or **peptide** sequences have pendant functional groups that are capable of being conjugated with pharmaceutically active compds. for drug delivery systems and crosslinked to form polymer matrixes as hydrogel membranes. The copolymers can also be formed into conductive materials by combination with electrolyte salts. Thus, polyethylene glycol-lysine copolymer was treated with N-hydroxysuccinimide and dicyclohexyl carbodiimide. Cephradine dissolved in a water-dioxane mixt. was reacted with the derivatized polyethylene glycol-lysine copolymer to prep. a conjugate.

SUPPL. TERM: PEG amino acid drug conjugate; hydrogel polyoxyalkylene amino acid pharmaceutical; electrolyte PEG amino acid pharmaceutical  
 INDEX TERM: Pharmaceutical dosage forms  
 acid (drug conjugates with modified polyoxyalkylene-amino copolymers in)  
 INDEX TERM: Electrodes  
 (lithium salt combinations with polyoxyalkylene-amino acid copolymers in)  
 INDEX TERM: Medical goods  
 (dressings, crosslinked polyoxyalkylene-amino acid copolymers for)  
 INDEX TERM: Gels  
 (hydro-, of crosslinked polyoxyalkylene-amino acid copolymers, for medical goods)  
 INDEX TERM: Antibodies

INDEX TERM: ROLE: BIOL (Biological study)  
 (monoclonal, conjugates with modified  
 polyoxyalkylene-amino acid copolymers, for effective  
 delivery)  
 INDEX TERM: Polyoxyalkylenes, compounds  
 ROLE: BIOL (Biological study)  
 (polyamide-, block, reaction products, with drugs, for  
 effective delivery)  
 INDEX TERM: Polyamides, compounds  
 ROLE: BIOL (Biological study)  
 (polyoxyalkylene-, block, reaction products, with drugs,  
 for effective delivery)  
 INDEX TERM: Urethane polymers, compounds  
 ROLE: BIOL (Biological study)  
 (polyoxyalkylene-, reaction products, with drugs, for  
 effective delivery)  
 INDEX TERM: 50-78-2D, Aspirin, derivs., conjugates with PEG-amino acid  
 copolymers 51-55-8D, Atropine, derivs., conjugates with  
 PEG-amino acid copolymers 56-54-2D, Quinidine, derivs.,  
 conjugates with PEG-amino acid copolymers 59-46-1D,  
 Procaine, derivs., conjugates with PEG-amino acid  
 copolymers  
 PEG-amino 59-67-6D, Nicotinic acid, derivs., conjugates with  
 acid copolymers 87-08-1D, Penicillin V, conjugates with  
 PEG-amino acid copolymers 130-95-0D, Quinine, derivs.,  
 conjugates with PEG-amino acid copolymers 148-82-3D,  
 Melfalan, derivs., conjugates with PEG-amino acid  
 copolymers 153-61-7D, Cephalothin, derivs., conjugates  
 with PEG-amino acid copolymers 299-42-3D, Ephedrine,  
 derivs., conjugates with PEG-amino acid copolymers  
 305-03-3D, Chlorambucil, derivs., conjugates with PEG-amino  
 acid copolymers 474-25-9D, derivs., conjugates with  
 PEG-amino acid copolymers 481-42-5D, Plumbagin, derivs.,  
 conjugates with PEG-amino acid copolymers 19660-77-6D,  
 Chlorin e6, derivs., conjugates with PEG-amino acid  
 copolymers 20830-75-5D, Digoxin, derivs., conjugates with  
 PEG-amino acid copolymers 20830-81-3D, derivs.,  
 conjugates  
 with PEG-amino acid copolymers 23214-92-8D, Adriamycin,  
 derivs., conjugates with PEG-amino acid copolymers  
 59277-89-3D, Acyclovir, derivs., conjugates with PEG-amino  
 acid copolymers  
 INDEX TERM: ROLE: BIOL (Biological study)  
 (as effective drug delivery forms)  
 822-06-0 4097-89-6, Tris(aminoethylamine)  
 INDEX TERM: ROLE: RCT (Reactant)  
 (crosslinking by, of modified PEG-lysine copolymer)  
 Lithium 2923-17-3 7550-35-8, Lithium bromide 10377-51-2,  
 iodide 14024-11-4 14283-07-9 21324-40-3 29935-35-1  
 33454-82-9  
 INDEX TERM: ROLE: BIOL (Biological study)  
 (electro-conductive materials contg. polyoxyalkylene-  
 amino acid copolymers and)  
 140913-01-5P  
 INDEX TERM: ROLE: PRP (Properties); PREP (Preparation)  
 (prepn. and conjugation of, with drugs)  
 870-46-2DP, tert-Butyl carbazate, reaction products with  
 PEG-lysine copolymer  
 INDEX TERM: ROLE: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and conversion of, to copolymers with pendant  
 acyl hydrazine groups)  
 141-43-5DP, Ethanolamine, reaction products with PEG-lysine  
 copolymer  
 ROLE: SPN (Synthetic preparation); PREP (Preparation)

INDEX TERM: (prepn. and conversion of, to copolymers with pendant ethanolamide groups)  
107-15-3DP, Ethylene diamine, reaction products with PEG-lysine copolymer  
ROLE: SPN (Synthetic preparation); PREP (Preparation)

INDEX TERM: (prepn. and conversion of, to copolymers with pendant ethylamine groups)  
124-09-4DP, Hexamethylene diamine, reaction products with PEG-lysine copolymer  
ROLE: SPN (Synthetic preparation); PREP (Preparation)

INDEX TERM: (prepn. and conversion of, to copolymers with pendant hexylamine groups)  
140913-58-2P  
ROLE: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)

INDEX TERM: (prepn. and hydrolysis of)  
140948-20-5P  
ROLE: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)

INDEX TERM: (prepn. and reaction of, with lysine Et ester)  
25190-06-1DP, Poly(butylene glycol), polymers with amino acid, drug conjugates 25322-68-3DP, polymers with amino acid, drug conjugates 25322-69-4DP, Polypropylene glycol, polymers with amino acid, drug conjugates 38821-53-3DP, Cephadrine, conjugates with PEG-amino acid copolymers 65607-79-6DP, Poly(isobutylene glycol), polymers with amino acid, drug conjugates 110882-23-0DP, Acyclovir succinate, conjugates with PEG-lysine copolymer carbate reaction products 140913-58-2DP, reaction products

with cephradine  
ROLE: PREP (Preparation)

INDEX TERM: (prepn. of, as effective drug delivery forms)  
58-22-0DP, Testosterone, derivs., conjugates with PEG-amino acid copolymers  
ROLE: PREP (Preparation)

INDEX TERM: (prepn. of, for effective drug delivery)  
33171-14-1  
ROLE: RCT (Reactant)

INDEX TERM: (reaction of, with PEG hydroxysuccinimide dicarbonate)  
1155-62-0 6066-82-6, N-Hydroxy succinimide  
ROLE: RCT (Reactant)

INDEX TERM: (reaction of, with polyethylene glycol)  
25322-68-3  
ROLE: RCT (Reactant)

INDEX TERM: (reaction of, with succinimide)  
9003-53-6, Polystyrene 9004-35-7, Cellulose acetate 9004-70-0, Cellulose nitrate 9011-14-7, Poly(methyl methacrylate) 25038-59-9, Poly(ethylene terephthalate), biological studies 25248-42-4, Poly(caprolactone), SRU 26023-30-3, Poly(lactic acid),

SRU 26100-51-6, Poly(lactic acid) 133418-81-2  
ROLE: BIOL (Biological study)

medical (semi-interpenetrating polymer networks contg. polyalkylene oxide-amino acid copolymers and, for goods)

L12 ANSWER 2 OF 18 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 1998:774090 CAPLUS

DOCUMENT NUMBER: 130:29230

TITLE: Pulsatile drug delivery system

INVENTOR(S): Bai, Jane Pei-fan

PATENT ASSIGNEE(S): Bioadvances LLC, USA

SOURCE: U.S., 13 pp.  
CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

INT. PATENT CLASSIF.:

MAIN: A61K009-26

SECONDARY: A61K009-58; A61K009-60; A61K009-62

US PATENT CLASSIF.: 424458000

CLASSIFICATION: 63-6 (Pharmaceuticals)

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5840329	A	19981124	US 1997-857105	19970515
WO 9851287	A1	19981119	WO 1998-US10052	19980515
W: AU, CA, CN, JP, MX				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9874933	A1	19981208	AU 1998-74933	19980515
PRIORITY APPLN. INFO.:			US 1997-857105	19970515
			WO 1998-US10052	19980515

ABSTRACT:

A pulsatile drug delivery system comprising of a plurality of particles is able to deliver drug in any desired patterns. A plurality of particles with multi-layer core capable of short-pulse release interlaced with long-duration release is designed for delivery of multi-agents simultaneously or sequentially, or single agent, according to a pre-programmed profile. A Carbopol 971P and CM-cellulose blend were prepd. for a controlled-release layer which was used for coating of a starch/sugar seed.

SUPPL. TERM: pulsatile drug delivery system

INDEX TERM: Epoxidized soybean oil

ROLE: DEV (Device component use); MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(plasticizer; injectable bioactive glass in a dextran suspension)

INDEX TERM: Polyoxyalkylenes, biological studies

ROLE: DEV (Device component use); MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(plasticizer; pulsatile drug delivery system)

INDEX TERM: Controlled release drug delivery systems

Plasticizers

(pulsatile drug delivery system)

INDEX TERM: Antigens

Peptides, biological studies



Polyhydric alcohols  
 Polyurethanes, biological studies  
 Proteins (general), biological studies  
 Shellac  
 Silicone rubber, biological studies  
 ROLE: THU (Therapeutic use); BIOL (Biological study); USES  
 (Uses)  
 (pulsatile drug delivery system)  
 INDEX TERM: 50-70-4, Sorbitol, biological studies 56-81-5,  
 1,2,3-Propanetriol, biological studies 57-55-6,  
 1,2-Propanediol, biological studies 77-93-0,  
 Triethyl citrate 84-66-2, Diethyl phthalate 84-74-2,  
 Dibutyl phthalate 84-75-3, Dihexyl phthalate  
 102-76-1, Triacetin 126-13-6, Sucrose acetate  
 isobutyrate 131-11-3, Dimethyl phthalate 2064-80-4,  
 Dioctyl azelate 25322-68-3 27251-75-8,  
 Triisooctyl trimellitate 53894-23-8, Triisononyl  
 trimellitate  
 ROLE: DEV (Device component use); MOA (Modifier or additive  
 use); THU (Therapeutic use); BIOL (Biological study); USES  
 (Uses)  
 INDEX TERM: (plasticizer; pulsatile drug delivery system)  
 84-78-6, Butyl octyl phthalate 109-43-3, Dibutyl sebacate  
 9003-05-8, Polyacrylamide 9003-20-7, Polyvinyl acetate  
 9003-39-8, Pvp 9003-53-6 9004-34-6D, Cellulose,  
 reaction products with acetaldehyde 9004-35-7D, Cellulose  
 acetate, derivs. 9004-57-3, Ethyl cellulose 9004-65-3,  
 Hpmc 9005-25-8, Starch, biological studies  
 9012-09-3, Cellulose triacetate 9017-21-4,  
 Polymethylstyrene 9017-80-5,  
 Poly(vinylbenzyltrimethylammo  
 nium chloride) 9035-69-2, Cellulose diacetate  
 9050-04-8, Calcium carboxymethyl cellulose 9063-38-1,  
 Sodium starch glycolate 25087-26-7, Polymethacrylic acid  
 25249-16-5, Poly(2-hydroxyethyl methacrylate) 39320-19-9,  
 Cellulose tripropionate 39320-21-3, Cellulose trivalerate  
 55962-79-3, Cellulose acetate valerate 62744-35-8,  
 Poly(sodium styrenesulfonate) 67351-34-2, Cellulose  
 tripalmitate 67351-36-4, Cellulose, tridodecanoate  
 67382-71-2, Cellulose trioctanoate 68686-83-9,  
 Polydiethylaminomethylstyrene 97089-04-8, Cellulose  
 acetate ethylcarbamate 97089-05-9, Cellulose acetate  
 methylcarbamate 115165-58-7, Cellulose acetate heptanoate  
 133875-01-1, Cellulose dipalmitate 157480-61-0, Cellulose  
 acetate octanoate 167077-72-7 216301-78-9, Cellulose  
 disuccinate 216301-79-0 216301-80-3, Cellulose valerate  
 palmitate 216301-81-4, Cellulose dimethylaminoacetate  
 ROLE: DEV (Device component use); MOA (Modifier or additive  
 use); THU (Therapeutic use); BIOL (Biological study); USES  
 (Uses)  
 INDEX TERM: (pulsatile drug delivery system)  
 69-65-8, D-Mannitol 87-99-0, Xylitol 9003-01-4,  
 Polyacrylic acid 9004-32-4 9004-54-0, Dextran,  
 biological studies 9004-62-0, Hydroxyethyl cellulose  
 9004-64-2, Hydroxypropyl cellulose 9005-32-7, Alginic  
 acid 9005-37-2, Propylene glycol alginate 9005-38-3, Sodium  
 alginate  
 ROLE: DEV (Device component use); THU (Therapeutic use);  
 BIOL (Biological study); USES (Uses)  
 (pulsatile drug delivery system)  
 REFERENCE COUNT: 9  
 REFERENCE(S):  
 (1) Chen; US 5397574 1995 CAPLUS  
 (2) Chen; US 5472708 1995 CAPLUS  
 (3) Doyon; US 5283065 1994

- (4) Geoghegan; US 5336504 1994
- (5) Geoghegan; US 5364620 1994
- (6) Geoghegan; US 5616345 1997
- (7) Kotwal; US 5395626 1995 CAPLUS
- (8) Paradissis; US 5445829 1995
- (9) Ueda; US 4871549 1989

L12 ANSWER 1 OF 18 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 1999:90531 CAPLUS

DOCUMENT NUMBER: 130:158409

TITLE: Tannic acid-polymer compositions for controlled release of pharmaceutical agents, particularly in the oral cavity

INVENTOR(S): Moshe Lerner, E. Itzhak; Rosenberger, Vered; Flashner,

PATENT ASSIGNEE(S): Perio Products Ltd., Israel

SOURCE: PCT Int. Appl., 71 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

INT. PATENT CLASSIF.:

MAIN: A61K009-20

SECONDARY: A61K009-70

CLASSIFICATION: 63-6 (Pharmaceuticals)

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9904764	A1	19990204	WO 1998-US15096	19980722
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
AU 9885784	A1	19990216	AU 1998-85784	19980722
EP 1003483	A1	20000531	EP 1998-936955	19980722
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
NO 2000000284	A	20000322	NO 2000-284	20000120
PRIORITY APPLN. INFO.:			US 1997-899121	19970723
			WO 1998-US15096	19980722

ABSTRACT:

The invention is directed to controlled- or sustained-release compns. for the release of pharmaceuticals or other agents. Essential components in the compns. of the present invention include one or more polymers and tannic acid or tannin. Release of the pharmaceutical or other agent is for a predetd. period of time and at a predetd. concn. The site of action of the agent is topical, local or systemic. Polymers are cellulosic or proteinaceous. A soln.

contg. tannic acid 1.7 and water 1.7 g was added dropwise into a soln. contg. Byco E 3.1 and water 3.1 g, and 0.45 g of the tannic acid-Byco prep. was mixed

with 0.63 g of nicotine-encapsulated MLV liposomes consisting of egg phosphatidylcholine 60.9, phosphatidylethanolamine 6.6, and cholesterol 32.5 %.

The mixt. was applied in polypropylene molds (280 mg/well) and dried at 35.degree. in the oven to form oral patches contg. nicotine .ltoreq. 2 mg. Release of nicotine from the oral patches was monitored through in vitro and in

vivo assays using saliva samples.

SUPPL. TERM: oral patch controlled release tannin protein; nicotine oral patch controlled release tannin protein

INDEX TERM: Albumins, biological studies  
Collagens, biological studies  
Gelatins, biological studies  
**Peptides**, biological studies  
Polyesters, biological studies  
Proteins (general), biological studies  
Tannins  
ROLE: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(buccal adhesive patches contg. tannins and polymers for controlled release of biol. active agents)

INDEX TERM: Oral drug delivery systems  
(buccal tapes; buccal adhesive patches contg. tannins and polymers for controlled release of biol. active agents)

INDEX TERM: Pharmaceutical tapes (drug delivery systems)  
(buccal; buccal adhesive patches contg. tannins and polymers for controlled release of biol. active agents)

INDEX TERM: Liposomes (drug delivery systems)  
Microcapsules (drug delivery systems)  
(controlled release; liq. compns. contg. tannins and polymers and entrapped drugs to manuf. buccal adhesive patches)

INDEX TERM: Gelatins, biological studies  
ROLE: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(hydrolyzates; buccal adhesive patches contg. tannins and polymers for controlled release of biol. active agents)

INDEX TERM: Controlled release drug delivery systems  
(liposomes; liq. compns. contg. tannins and polymers and entrapped drugs to manuf. buccal adhesive patches)

INDEX TERM: Controlled release microspheres (drug delivery systems)  
Nanocapsules (drug delivery systems)  
(liq. compns. contg. tannins and polymers and entrapped drugs to manuf. buccal adhesive patches)

INDEX TERM: Lecithins  
Phosphatidylcholines, biological studies  
Phosphatidylethanolamines, biological studies  
Phosphatidylglycerols  
Phosphatidylinositols  
Phosphatidylserines  
Phospholipids, biological studies  
Sphingolipids  
Sphingomyelins  
ROLE: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(liq. compns. contg. tannins and polymers and entrapped drugs to manuf. buccal adhesive patches)

INDEX TERM: Controlled release capsules (drug delivery systems)  
(microcapsules; liq. compns. contg. tannins and polymers and entrapped drugs to manuf. buccal adhesive patches)

INDEX TERM: Nanocapsules (drug delivery systems)  
(nanospheres; liq. compns. contg. tannins and polymers and entrapped drugs to manuf. buccal adhesive patches)

INDEX TERM: 54-11-5, Nicotine 54-11-5D, Nicotine, polymer complexes  
54-11-5D, Nicotine, salts 54-21-7, Sodium salicylate  
77-93-0, Triethyl citrate 87-33-2, Isosorbide  
dinitrate 92-13-7, Pilocarpine 137-58-6, Lidocaine  
379-79-3 5104-49-4, Flurbiprofen 6190-39-2,  
Dihydroergotamine mesylate 9000-01-5, Gum Acacia  
9000-30-0, Guar gum 9000-65-1, Gum tragacanth  
9000-69-5,

mononitrate

36322-90-4

Pectin 9004-35-7, Acetyl cellulose 9004-38-0,  
Cellulose acetate phthalate 9004-57-3, Ethyl cellulose  
9004-62-0, Hydroxyethyl cellulose 9004-64-2,  
Hydroxypropylcellulose 9004-65-3, Hydroxypropylmethyl  
cellulose 9005-32-7, Alginic acid 9005-35-0, Calcium  
alginate 9005-38-3, Sodium alginate 9011-14-7,  
Methylmethacrylate, polymer 9012-76-4, Chitosan  
11138-66-2, Xanthan gum 16051-77-7, Isosorbide

21829-25-4, Nifedipine 25086-15-1, Eudragit L-100  
25212-88-8, Eudragit L 30D-55 26023-30-3, Lactic acid  
polymer, sru 26100-51-6, Lactic acid, polymer  
34346-01-5, Glycolic acid-lactic acid copolymer

39301-46-7, Calcium pectinate 99614-01-4, Ondansetron  
hydrochloride 103628-48-4, Sumatriptan succinate  
134499-35-7, BycoE 185702-37-8, Eudragit NE-30  
220307-57-3

ROLE: THU (Therapeutic use); BIOL (Biological study); USES  
(Uses)

(buccal adhesive patches contg. tannins and polymers for  
controlled release of biol. active agents)

REFERENCE COUNT:

REFERENCE(S):

17

- (1) Abe Yoshiaki; US 4530829 A 1985
- (2) Armour And Co; GB 918754 A 1963
- (3) Kiyuukiyuu Yakuhin Kogyo Kk; JP 07187993 A 1995
- (4) Kyukyu Yakuhin Kogyo Kk; JP 07187993 A
- (5) Monneron & Guye; GB 104609 A 1917
- (6) Nitta Gelatin Inc; JP 01166763 A 1989
- (7) Nitta Gelatin Kk; JP 01166763 A
- (8) Payne, M; GB 2036750 A 1980 CAPLUS
- (9) Sawai Seiyaku Kk; JP 09095442 A
- (10) Sawai Seiyaku Kk; JP 09095442 A 1997
- (11) Shinetsu Chem Co Ltd; JP 04312522 A
- (12) Shinonaga Kasei Kk; JP 04114655 A
- (13) Shinonaga Kasei Kk; JP 04114655 A 1992
- (14) Takeda Chem Ind Ltd; JP 08319232 A
- (15) Takeda Chem Ind Ltd; JP 08319232 A 1996
- (16) Yoshiaki Kawashima; JP 04312522 A 1992

L29 ANSWER 49 OF 49 USPATFULL  
AN 75:12424 USPATFULL  
TI Cellulose ether compositions useful as enteric coatings  
IN Koyanagi, Shunichi, Naoetsu, Japan  
Ogawa, Kinya, Naoetsu, Japan  
Onda, Yoshiro, Naoetsu, Japan  
Yamamoto, Akira, Naoetsu, Japan  
PA Shinetsu Chemical Company, Tokyo, Japan (non-U.S. corporation)  
PI US 3870702 19750311  
AI US 1973-414186 19731109 (5)  
RLI Continuation of Ser. No. US 1971-171005, filed on 11 Aug 1971, now  
abandoned which is a continuation-in-part of Ser. No. US 1971-118555,  
filed on 24 Feb 1971, now patented, Pat. No. US 3712886  
PRAI JP 1971-15953 19710319  
DT Utility  
LN.CNT 487  
INCL INCLM: 260/226.000  
INCLS: 106/187.000; 106/188.000; 106/189.000; 106/190.000; 106/191.000;  
106/197.000R; 260/225.000; 260/231.000R; 424/362.000  
NCL NCLM: 536/066.000  
NCLS: 106/174.100; 106/182.100; 106/192.100; 106/193.100; 106/194.100;  
106/195.100; 514/960.000; 536/064.000  
IC [1]  
ICM: C08B011-00  
EXF 260/226; 260/231A  
C

L29 ANSWER 20 OF 49 USPATFULL  
AN 95:107937 USPATFULL  
TI Controlled-release formulations coated with aqueous dispersions of  
ethylcellulose  
IN Oshlack, Benjamin, New York, NY, United States  
Chasin, Mark, Manalpan, NJ, United States  
Pedi, Jr., Frank, Yorktown Heights, NY, United States  
PA Euroceltique, S.A., Luxembourg (non-U.S. corporation)  
PI US 5472712 19951205  
AI US 1993-81618 19930623 (8)  
RLI Continuation-in-part of Ser. No. US 1991-814111, filed on 24 Dec 1991,  
now patented, Pat. No. US 5273760, issued on 28 Dec 1993  
DT Utility  
LN.CNT 2859  
INCL INCLM: 424/480.000  
INCLS: 424/461.000; 424/495.000; 424/408.000; 424/418.000; 514/772.100;  
514/781.000; 427/002.160; 427/213.310; 427/372.200; 427/377.000;  
071/064.070; 071/064.130  
NCL NCLM: 424/480.000  
NCLS: 071/064.070; 071/064.130; 424/408.000; 424/418.000; 424/461.000;  
424/495.000; 427/002.160; 427/213.310; 427/372.200; 427/377.000;  
514/772.100; 514/781.000  
IC [6]  
ICM: A61K009-14  
ICS: A61K009-16; A61K009-36; A61K009-62  
EXF 424/480; 424/495; 514/772.1; 514/781; 427/3; 427/213.31; 427/372.2;  
427/377; 428/407  
CAS INDEXI

L21 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 1988:62488 CAPLUS

DOCUMENT NUMBER: 108:62488

TITLE: Pharmaceutical oral compositions containing bioactive proteinaceous materials, preferably insulin

INVENTOR(S): Cho, Young W.

PATENT ASSIGNEE(S): Eurosium Laboratories, Inc., USA

SOURCE: PCT Int. Appl., 110 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

INT. PATENT CLASSIF.:

MAIN: A61K009-64

SECONDARY: A61K009-62; A61K009-48; A61K009-16; A61K009-50

CLASSIFICATION: 63-6 (Pharmaceuticals)

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8705505	A1	19870924	WO 1987-US485	19870312
W: AU, BB, BG, BR, DK, FI, HU, JP, KP, KR, LK, MC, MG, MW, NO, RO, SD, SU				
RW: AT, BE, BJ, CF, CG, CH, CM, DE, FR, GA, GB, IT, LU, ML, MR, NL, SE, SN, TD, TG				
US 4849227	A	19890718	US 1987-21625	19870303
AU 8772073	A1	19871009	AU 1987-72073	19870312
AU 608756	B2	19910418		
EP 302065	A1	19890208	EP 1987-902224	19870312
EP 302065	B1	19940810		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
JP 01500589	T2	19890301	JP 1987-502136	19870312
JP 05076928	B4	19931025		
HU 48821	A2	19890728	HU 1987-1909	19870312
HU 207452	B	19930428		
ZA 8702018	A	19880224	ZA 1987-2018	19870319
CN 87103560	A	19880518	CN 1987-103560	19870320
CA 1281645	A1	19910319	CA 1987-532643	19870320
DK 8706118	A	19871120	DK 1987-6118	19871120
NO 8704852	A	19880120	NO 1987-4852	19871120
FI 8804291	A	19880919	FI 1988-4291	19880919
FI 95538	B	19951115		
FI 95538	C	19960226		
SU 1814559	A3	19930507	SU 1988-4356578	19880920
PRIORITY APPLN. INFO.:			US 1986-842625	19860321
			WO 1987-US485	19870312

ABSTRACT:

A compn. for oral administration of a proteinaceous material in biol. active form comprises (a) particles (1-100 .mu. diam.) consisting of a solid emulsifying agent and a surfactant, (b) a biol. active proteinaceous material bound to the surface of the above particles with a binder, and (c) a lipid coating (0.05-1.0 .mu. thick) surrounding the particles contg. the bound proteinaceous material, which is preferably insulin. Particles (.apprx.50 .mu. diam.) were prepd. with a mixt. of cholesterol, Na lauryl sulfate, and methyl and propyl parabens (pH 6, jet mill). Insulin was then bound to the particles



INDEX TERM: materials and)  
Lecithins  
ROLE: THU (Therapeutic use); BIOL (Biological study); USES  
(Uses)  
(egg yolk, oral pharmaceuticals contg. proteinaceous  
bioactive materials and)  
INDEX TERM: Glycerides, biological studies  
ROLE: THU (Therapeutic use); BIOL (Biological study); USES  
(Uses)  
(mono-, oral pharmaceuticals contg. proteinaceous  
bioactive materials and)  
INDEX TERM: Pharmaceutical dosage forms  
(oral, bioactive proteinaceous materials-contg.)  
INDEX TERM: Lecithins  
ROLE: THU (Therapeutic use); BIOL (Biological study); USES  
(Uses)  
(soya, oral pharmaceutical compns. contg. insulin and)  
INDEX TERM: Pharmaceutical dosage forms  
(tablets, bioactive proteinaceous materials-contg.)  
INDEX TERM: 9005-25-8, Starch, biological studies  
ROLE: THU (Therapeutic use); BIOL (Biological study); USES  
(Uses)  
(capsules contg. insulin and pancreatic lipase and)  
INDEX TERM: 11070-73-8 12584-58-6  
ROLE: PROC (Process)  
(oral formulations of)  
INDEX TERM: 56-75-7, Chloramphenicol 57-22-7, Vincristine 61-75-6  
114-07-8, Erythromycin 137-58-6, Lidocaine 456-59-7,  
Cyclandelate 1403-66-3, Gentamicin 9001-27-8, Blood  
coagulation factor VIII 9002-01-1, Streptokinase  
9004-10-8, Insulin, biological studies 9039-53-6,  
Urokinase 11056-06-7, Bleomycin 14176-10-4, Cetiedil  
23214-92-8, Adriamycin 53714-56-0, Leuprolide  
74268-14-7, Cephalosporidine  
ROLE: THU (Therapeutic use); BIOL (Biological study); USES  
(Uses)  
(oral pharmaceutical compns. contg.)  
INDEX TERM: 56-40-6, biological studies 144-55-8, Sodium bicarbonate,  
biological studies 298-14-6, Potassium bicarbonate  
9004-99-3, Emanon 3199 10043-52-4, biological  
studies 14807-96-6, Talc, biological studies 25086-15-1  
ROLE: THU (Therapeutic use); BIOL (Biological study); USES  
(Uses)  
(oral pharmaceutical compns. contg. insulin and)  
INDEX TERM: 148-24-3P, preparation 151-21-3P, Sodium lauryl sulfate,  
biological studies 25322-68-3 25322-68-3D, fatty acid  
esters 31566-31-1, Glyceryl monostearate 53237-50-6  
ROLE: PREP (Preparation)  
(oral pharmaceuticals contg. proteinaceous bioactive  
materials and)  
INDEX TERM: 50-21-5, Lactic acid, biological studies 54-64-8  
56-84-8, Aspartic acid, biological studies 56-87-1,  
Lysine, biological studies 57-10-3, biological studies  
57-11-4, preparation 57-88-5, Cholesterol, biological  
studies 57-88-5D, Cholesterol, esters 60-00-4D, salts  
60-12-8 71-00-1, Histidine, biological studies 74-79-3,  
biological studies 77-86-1 77-92-9, biological studies  
89-83-8 94-26-8, Butyl paraben 99-76-3, Methyl paraben  
100-51-6, biological studies 100-63-0 102-71-6,  
biological studies 108-95-2, biological studies  
110-44-1, Sorbic acid 112-80-1, biological studies  
112-92-5 120-47-8, Ethyl paraben 124-30-1, Stearylamine  
144-48-9, Iodoacetamide 520-45-6 532-32-1, Sodium  
benzoate 554-68-7, Triethylamine hydrochloride  
623-84-7,  
Propylene glycol diacetate 822-16-2, Sodium stearate

Hydroxylamine,

1323-39-3, Propylene glycol monostearate 1338-39-2,  
Sorbitan monolaurate 1338-41-6, Sorbitan monostearate  
4418-26-2, Sodium dehydroacetate 7803-49-8,

biological studies 9000-01-5, Gum acacia 9000-92-4,  
Amylase 9001-62-1 9001-92-7, Proteinase 9003-39-8,  
Povidone 9004-32-4, Sodium carboxymethylcellulose  
9004-34-6, Cellulose, biological studies 9004-44-8,  
Cellulose phthalate 9004-57-3, Ethylcellulose  
9004-64-2, Hydroxypropyl cellulose 9004-65-3,  
Hydroxypropyl methylcellulose 9004-67-5, Methylcellulose  
9004-99-3 9005-64-5, Polysorbate 20 9005-65-6,  
Polysorbate 80 9005-66-7, Polysorbate 40 9005-67-8,  
Polysorbate 60 9050-31-1, Hydroxypropyl methylcellulose  
phthalate 15595-35-4, L-Arginine hydrochloride  
ROLE: THU (Therapeutic use); BIOL (Biological study); USES  
(Uses)

INDEX TERM:

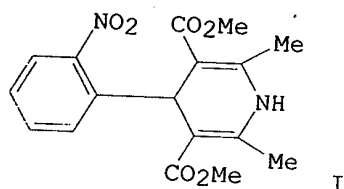
(oral pharmaceuticals contg. proteinaceous bioactive  
materials and)  
94-13-3, Propyl paraben  
ROLE: THU (Therapeutic use); BIOL (Biological study); USES  
(Uses)  
(oral pharmaceuticals contg., proteinaceous bioactive  
materials and)

L33 ANSWER 88 OF 104 USPATFULL  
AN 88:1120 USPATFULL  
TI Dosage system and method of using same  
IN Eckenhoff, James B., Los Altos, CA, United States  
Cortese, Richard, Los Gatos, CA, United States  
Landrau, Felix A., Milpitas, CA, United States  
PA ALZA Corporation, Palo Alto, CA, United States (U.S. corporation)  
PI US 4717566 19880105  
AI US 1986-877586 19860623 (6)  
RLI Continuation-in-part of Ser. No. US 1985-780863, filed on 27 Sep 1985,  
now patented, Pat. No. US 4612186, issued on 16 Sep 1986 which is a  
continuation-in-part of Ser. No. US 1984-590778, filed on 19 Mar 1984,  
now patented, Pat. No. US 4595583, issued on 17 Jun 1986  
DT Utility  
LN.CNT 1254  
INCL INCLM: 424/438.000  
INCLS: 424/473.000; 424/DIG.010; 514/053.000; 604/890.000; 604/892.100  
NCL NCLM: 424/438.000  
NCLS: 424/473.000; 424/DIG.010; 514/053.000; 604/892.100  
IC [4]  
ICM: A61K009-00  
ICS: A61K009-20; A61M031-00  
EXF 424/15; 424/438; 424/473; 424/DIG.10; 604/890; 604/892; 514/53  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2000 ACS  
 ACCESSION NUMBER: 1983:528360 CAPLUS  
 DOCUMENT NUMBER: 99:128360  
 TITLE: Nifedipine formulations with cellulose ethers  
 PATENT ASSIGNEE(S): Toa Eiyo Kagaku Kogyo Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 INT. PATENT CLASSIF.: A61K009-16; A61K009-20  
 ADDITIONAL: A61K031-455  
 CLASSIFICATION: 63-6 (Pharmaceuticals)  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 58109412	A2	19830629	JP 1981-207173	19811223

GRAPHIC IMAGE:



# ABSTRACT:

The bioavailability of nifedipine (I) [21829-25-4] is increased by the addn. of carboxymethyl Et cellulose [37205-99-5] (and/or Et cellulose [\*\*\*9004-57-3\*\*\*]) and surfactants. Thus, 400 mL alc. was added to a mixt. of

I 10, Et CM-cellulose 40, stearic acid polyoxyl-40 [9004-99-3] 20, and hydroxypropyl cellulose [9004-64-2] 3 g, and this mixt. was sprayed on granules consisting of 118 g lactose and 49 g microcryst. cellulose.

These granules (120 g) were mixed with talc 2, Mg stearate 1, and Ca CM-cellulose 2 g and made into tablets.

SUPPL. TERM: nifedipine cellulose ether tablet; bioavailability  
 nifedipine  
 INDEX TERM: 21829-25-4  
 ROLE: BIOL (Biological study)  
 (bioavailability of, from tablets, cellulose ethers and  
 surfactants increase of)  
 INDEX TERM: 56-81-5, biological studies 57-55-6, biological studies  
 9004-57-3 9004-64-2 9004-65-3  
 9004-99-3 25322-68-3 37205-99-5  
 ROLE: BIOL (Biological study)  
 (nifedipine bioavailability from tablets increase by)

L18 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2000 ACS  
 ACCESSION NUMBER: 1990:117640 CAPLUS  
 DOCUMENT NUMBER: 112:117640  
 TITLE: Use of enzymatically decomposable compositions for  
 coating feedstuff additives for ruminants  
 INVENTOR(S): Ardaillon, Pierre; Bourrain, Paul  
 PATENT ASSIGNEE(S): Rhone-Poulenc Sante, Fr.  
 SOURCE: Eur. Pat. Appl., 7 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 INT. PATENT CLASSIF.:  
 MAIN: A23K001-00  
 SECONDARY: A23K001-18; A61K009-52; A61K009-22  
 CLASSIFICATION: 17-12 (Food and Feed Chemistry)  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 321337	A1	19890621	EP 1988-403174	19881214
EP 321337	B1	19920304		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
FR 2624351	A1	19890616	FR 1987-17455	19871215
FR 2624351	B1	19911122		
US 4983403	A	19910108	US 1988-283907	19881213
ZA 8809367	A	19890927	ZA 1988-9367	19881214
JP 01243947	A2	19890928	JP 1988-313985	19881214
AT 72939	E	19920315	AT 1988-403174	19881214
ES 2029527	T3	19920816	ES 1988-403174	19881214
SU 1797470	A3	19930223	SU 1988-4613010	19881214
AU 8826913	A1	19890615	AU 1988-26913	19881215
AU 624589	B2	19920618		
RU 2038025	C1	19950627	RU 1992-5010540	19920109
PRIORITY APPLN. INFO.:				
			FR 1987-17455	19871215
			EP 1988-403174	19881214

ABSTRACT:  
 Biol. substances, e.g. drugs, vitamins, amino acids, are encapsulated in a compn. which is stable in the rumen and in the acid pH of the rennet stomach, but is enzymically degraded in the small intestine. The encapsulating compn. comprises **zein**, a water-insol. polymer (and, optionally, a plastifier), or **zein**, a hydrophobic substance (and optionally, a water-insol. polymer). Thus, methionine granules were spray-coated with a compn. contg. **zein** 69.2, ethylcellulose 23, and triacetin 7.7%. After 12 h in sheeps rumen 6.64% of the N had disappeared; after 4 h in sheeps rennet stomach, 14.82% was gone; but after 3 h in the small intestine, 95.72% of the N had been solubilized.

SUPPL. TERM: encapsulation feed additive **zein** polymer; drug  
 encapsulation feed **zein** polymer; vitamin  
 encapsulation feed **zein** polymer; amino acid  
 encapsulation feed **zein** polymer  
 INDEX TERM: Feed  
 (additives, for ruminants, encapsulation of, **zein**  
 and water-insol. polymers in)  
 INDEX TERM: Zeins

INDEX TERM: ROLE: BIOL (Biological study)  
 (feed additive encapsulation compn. contg. water-insol.  
 polymers and)  
 Ruminant  
 (feed additives for, encapsulation of, zein and  
 water-insol. polymers in)  
 INDEX TERM: Sheep  
 (methionine feed additive for, encapsulation of,  
 zein and ethylcellulose and triacetin in)  
 INDEX TERM: Fatty acids, biological studies  
 ROLE: BIOL (Biological study)  
 (ruminant feed additive encapsulation compn. contg.  
 zein and water-insol. polymer and)  
 INDEX TERM: Amino acids, biological studies  
 Vitamins  
 ROLE: BIOL (Biological study)  
 (ruminant feed additive, encapsulation of, zeins and  
 water-insol. polymers in)  
 INDEX TERM: Polymers, biological studies  
 ROLE: BIOL (Biological study)  
 (water-insol., feed additive encapsulation compn. contg.  
 zeins and)  
 INDEX TERM: Pharmaceutical dosage forms  
 (capsules, ruminant feed additive, zeins and  
 water-insol.  
 polymers in)  
 INDEX TERM: Alcohols, biological studies  
 Esters, biological studies  
 ROLE: BIOL (Biological study)  
 (fatty, ruminant feed additive encapsulation compn.  
 contg. zein and water-insol. polymer and)  
 INDEX TERM: 9004-34-6D, Cellulose, esters 9004-34-6D, Cellulose,  
 ethers  
 ROLE: BIOL (Biological study)  
 (ruminant feed additive encapsulation compn. contg.  
 plastifier and zein and)  
 INDEX TERM: 9003-20-7, Polyvinyl acetate 9004-35-7, Cellulose  
 acetate 9004-36-8, Cellulose acetobutyrate 9004-48-2,  
 Cellulose propionate 9004-57-3, Ethylcellulose  
 ROLE: BIOL (Biological study)  
 (ruminant feed additive encapsulation compn. contg.  
 zein and plastifier and)  
 INDEX TERM: 57-55-6, 1,2-Propanediol, biological studies  
 102-76-1, Triacetin  
 ROLE: BIOL (Biological study)  
 (ruminant feed additive encapsulation compn. contg.  
 zein and water-insol. polymer and)  
 INDEX TERM: 56-87-1, Lysine, biological studies 63-68-3, Methionine,  
 biological studies  
 ROLE: BIOL (Biological study)  
 (ruminant feed additive, encapsulation of, zeins and  
 water-insol. polymers in)

L35 ANSWER 5 OF 9 USPATFULL  
AN 1999:33614 USPATFULL  
TI Process for the formation of plasticized proteinaceous materials and  
compositions containing the same  
IN Abdel-Malik, Magdy Malak, Chester, NJ, United States  
D'Ottavio, Nick Steve, Hackettstown, NJ, United States  
Dave , Vipul Bhupendra, Summit, NJ, United States  
Vishwanathan, Arun, Yardley, PA, United States  
PA Warner-Lambert Company, Morris Plains, NJ, United States (U.S.  
corporation)  
PI US 5882702 19990316  
AI US 1997-936570 19970924 (8)  
PRAI US 1996-27509 19961007 (60)  
DT Utility  
LN.CNT 2519  
INCL INCLM: 426/003.000  
INCLS: 426/656.000; 426/660.000; 436/086.000  
NCL NCLM: 426/003.000  
NCLS: 426/656.000; 426/660.000; 436/086.000  
IC [6]  
ICM: A23G003-30  
ICS: A23J001-00; G01N033-00  
EXF 426/660; 426/656; 426/3; 426/519; 426/512; 436/86  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L36 ANSWER 18 OF 19 USPATFULL  
AN 90:44352 USPATFULL  
TI Aqueous based pharmaceutical coating composition for dosage forms  
IN Edgren, David E., El Granada, CA, United States  
Theeuwes, Felix, Los Altos, CA, United States  
PA ALZA Corporation, Palo Alto, CA, United States (U.S. corporation)  
PI US 4931285 19900605  
AI US 1988-187621 19880428 (7)  
DT Utility  
LN.CNT 680  
INCL INCLM: 424/473.000  
INCLS: 424/468.000  
NCL NCLM: 424/473.000  
NCLS: 424/468.000  
IC [5]  
ICM: A61K009-24  
EXF 424/468; 424/473; 424/488; 424/469; 424/474; 424/486  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.



L33 ANSWER 3 OF 104 USPATFULL  
AN 2000:18070 USPATFULL  
TI Immediate release tablet cores of insoluble drugs having  
sustained-release coating  
IN Oshlack, Benjamin, New York, NY, United States  
Chasin, Mark, Manalapan, NJ, United States  
PA Euro-Celtique, S.A., Luxembourg, Luxembourg (non-U.S. corporation)  
PI US 6024982 20000215  
AI US 1995-467575 19950606 (8)  
RLI Division of Ser. No. US 1993-156460, filed on 23 Nov 1993, now  
patented,  
Pat. No. US 5500227  
DT Utility  
LN.CNT 1433  
INCL INCLM: 424/476.000  
INCLS: 424/468.000; 424/475.000; 424/480.000; 424/481.000; 424/482.000  
NCL NCLM: 424/476.000  
NCLS: 424/468.000; 424/475.000; 424/480.000; 424/481.000; 424/482.000  
IC [7]  
ICM: A61K009-22  
ICS: A61K009-32; A61K009-34; A61K009-36; A61K009-42  
EXF 424/468; 424/469; 424/474; 424/479; 424/476; 424/480; 424/482; 424/481;  
424/475

L33 ANSWER 23 OF 104 USPATFULL  
AN 97:99040 USPATFULL  
TI Controlled release drug delivery device  
IN Savastano, Louis, Livingston, NJ, United States  
Carr, James, Butler, NJ, United States  
Quadros, Elizabeth, Brooklyn, NY, United States  
Shah, Shailesh, Union, NJ, United States  
Khanna, Satish Chaudra, Bottminger, Switzerland  
PA Ciba-Geigy Corporation, Tarrytown, NY, United States (U.S. corporation)  
PI US 5681584 19971028  
AI US 1996-622238 19960322 (8)  
RLI Continuation of Ser. No. US 1993-165437, filed on 10 Dec 1993, now  
abandoned which is a continuation-in-part of Ser. No. US 1993-52435,  
filed on 23 Apr 1993, now abandoned  
DT Utility  
LN.CNT 1039  
INCL INCLM: 424/473.000  
INCLS: 424/468.000  
NCL NCLM: 424/473.000  
NCLS: 424/468.000  
IC [6]  
ICM: A61K009-24  
EXF 424/473; 424/468  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L33 ANSWER 25 OF 104 USPATFULL  
AN 97:83636 USPATFULL  
TI Banded prolonged release active agent dosage form  
IN Wong, Patrick S.-L., Palo Alto, CA, United States  
Edgren, David Emil, El Granada, CA, United States  
Dong, Liang C., Sunnyvale, CA, United States  
Ferrari, Vincent Joseph, Foster City, CA, United States  
PA ALZA Corporation, Palo Alto, CA, United States (U.S. corporation)  
PI US 5667804 19970916  
AI US 1996-671226 19960627 (8)  
RLI Continuation of Ser. No. US 1995-394074, filed on 24 Feb 1995, now  
patented, Pat. No. US 5534263  
DT Utility  
LN.CNT 712  
INCL INCLM: 424/472.000  
INCLS: 424/464.000; 424/467.000; 424/468.000; 424/473.000; 424/484.000;  
424/486.000; 424/463.000  
NCL NCLM: 424/472.000  
NCLS: 424/463.000; 424/464.000; 424/467.000; 424/468.000; 424/473.000;  
424/484.000; 424/486.000  
IC [6]  
ICM: A61K009-24  
ICS: A61K009-44; A61K009-22  
EXF 424/464; 424/467; 424/468; 424/463; 424/473; 424/451; 424/484; 424/486  
C

L33 ANSWER 30 OF 104 USPATFULL  
AN 96:60452 USPATFULL  
TI Active agent dosage form comprising a matrix and at least two insoluble  
bands  
IN Wong, Patrick S.-L., Palo Alto, CA, United States  
Edgren, David E., El Granada, CA, United States  
Dong, Liang C., Sunnyvale, CA, United States  
Ferrari, Vincent J., Foster City, CA, United States  
PA Alza Corporation, Palo Alto, CA, United States (U.S. corporation)  
PI US 5534263 19960709  
AI US 1995-394074 19950224 (8)  
DT Utility  
LN.CNT 776  
INCL INCLM: 424/473.000  
INCLS: 424/484.000; 424/486.000  
NCL NCLM: 424/473.000  
NCLS: 424/484.000; 424/486.000  
IC [6]  
ICM: A61K009-24  
EXF 424/484; 424/467; 424/468; 424/471; 424/474; 424/473; 424/486  
C

L33 ANSWER 32 OF 104 USPATFULL  
 AN 96:22910 USPATFULL  
 TI Immediate release tablet cores of insoluble drugs having  
 sustained-release coating  
 IN Oshlack, Benjamin, New York, NY, United States  
 Chasin, Mark, Manalapan, NJ, United States  
 PA Euro-Celtique, S.A., Luxembourg (non-U.S. corporation)  
 PI US 5500227 19960319  
 AI US 1993-156460 19931123 (8)  
 DT Utility  
 LN.CNT 1552  
 INCL INCLM: 424/476.000  
 INCLS: 424/479.000; 424/480.000; 424/481.000; 424/482.000; 424/468.000  
 NCL NCLM: 424/476.000  
 NCLS: 424/468.000; 424/479.000; 424/480.000; 424/481.000; 424/482.000  
 IC [6]  
 ICM: A61K009-32  
 ICS: A61K009-34; A61K009-36; A61K009-42  
 EXF 424/479; 424/475; 424/480; 424/482; 424/476; 424/481  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L33 ANSWER 33 OF 104 EUROPATFULL COPYRIGHT 2000 WILA

PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET

AN 655240 EUROPATFULL ED 19991212 EW 199522 FS OS STA B  
 TIEN Immediate release tablet cores of insoluble drugs having  
 substained-release coating.  
 TIDE Rasch freisetzende Tablettenkerne mit unloeslichen Arzneistoffen und  
 mit einem Retardueberzug.  
 TIFR Noyaux de comprimés a liberation immediate contenant des medicaments  
 insolubles et portant un enrobage a effet retard.  
 IN Oshlack, Benjamin, 351 East 84th Street, New York, NY 10028, US;  
 Chasin, Mark, 3 Wayne Court, Manalapan, NJ 07726, US  
 PA Euroceltique S.A., 122 Boulevard de la Petrusse, Luxembourg, LU  
 SO Wila-EPZ-1995-H22-T1b  
 DS R AT; R BE; R CH; R DE; R ES; R FR; R GB; R IE; R IT; R LI; R LU; R NL;  
 R PT; R SE  
 PIT EPA2 EUROPÄISCHE PATENTANMELDUNG  
 PI EP 655240 A2 19950531  
 OD 19950531  
 AI EP 1994-117345 19941103  
 PRAI US 1993-156460 19931123  
 IC ICM A61K009-34

L33 ANSWER 35 OF 104 USPATFULL  
AN 95:107937 USPATFULL  
TI Controlled-release formulations coated with aqueous dispersions of  
ethylcellulose  
IN Oshlack, Benjamin, New York, NY, United States  
Chasin, Mark, Manalpan, NJ, United States  
Pedi, Jr., Frank, Yorktown Heights, NY, United States  
PA Euroceltique, S.A., Luxembourg (non-U.S. corporation)  
PI US 5472712 19951205  
AI US 1993-81618 19930623 (8)  
RLI Continuation-in-part of Ser. No. US 1991-814111, filed on 24 Dec 1991,  
now patented, Pat. No. US 5273760, issued on 28 Dec 1993  
DT Utility  
LN.CNT 2859  
INCL INCLM: 424/480.000  
INCLS: 424/461.000; 424/495.000; 424/408.000; 424/418.000; 514/772.100;  
514/781.000; 427/002.160; 427/213.310; 427/372.200; 427/377.000;  
071/064.070; 071/064.130  
NCL NCLM: 424/480.000  
NCLS: 071/064.070; 071/064.130; 424/408.000; 424/418.000; 424/461.000;  
424/495.000; 427/002.160; 427/213.310; 427/372.200; 427/377.000;  
514/772.100; 514/781.000  
IC [6]  
ICM: A61K009-14  
ICS: A61K009-16; A61K009-36; A61K009-62  
EXF 424/480; 424/495; 514/772.1; 514/781; 427/3; 427/213.31; 427/372.2;  
427/377; 428/407  
CAS INDEXI

L33 ANSWER 40 OF 104 EUROPATFULL COPYRIGHT 2000 WILA

PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET

AN 630646 EUROPATFULL ED 20000123 EW 199452 FS OS STA B  
TIEN Controlled-release formulations coated with aqueous dispersions of  
ethylcellulose.  
TIDE Formulierungen mit kontrollierter Abgabe, ueberzogen mit waessrigen  
Dispersionen von Ethylcellulose.  
TIFR Formulations a liberation controlee enrobees avec dispersions aqueuses  
d'ethylcellulose.  
IN Oshlack, Benjamin, 351 East 84th Street, New York, New York 10028, US;  
Chasin, Mark, 3 Wayne Court, Manalapan, New Jersey 07726, US;  
Pedi, Frank Jr., 2773 Hyatt Street, Yorktown Heights, New York 10598,  
US  
PA Euroceltique S.A., 122 Boulevard de la Petrusse, Luxembourg, LU  
SO Wila-EPZ-1994-H52-T1b  
DS R AT; R BE; R CH; R DE; R DK; R ES; R FR; R GB; R GR; R IE; R IT; R LI;  
R LU; R MC; R NL; R PT; R SE  
PIT EPA1 EUROPAEISCHE PATENTANMELDUNG  
PI EP 630646 A1 19941228  
OD 19941228  
AI EP 1994-109115 19940614  
PRAI US 1993-81618 19930623  
IC ICM A61K009-50

L33 ANSWER 41 OF 104 EUROPATFULL COPYRIGHT 2000 WILA

PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET

AN 621032 EUROPATFULL ED 20000130 EW 199443 FS OS STA B  
TIEN Controlled release drug delivery device.  
TIDE Wirkstoffabgabevorrichtung mit gesteuerter Freigabe.  
TIFR Dispositif d'administration de medicaments a liberation controlee.  
IN Savastano, Louis, 21 Berkeley Place, Livingston, NJ 07039, US;  
Carr, James, 108 Valley Road, Butler, NJ 07405, US;  
Quadros, Elizabeth, 1043 Cropsey Avenue, Brooklyn, NY 11228, US;  
Shah, Shailesh, 416 Huntington Road, Union, NJ 07204, US;  
Khanna, Satish Chandra, Spitzackerstrasse 6, CH-4103 Bottmingen, CH  
PA CIBA-GEIGY AG, Klybeckstrasse 141, CH-4002 Basel, CH  
SO Wila-EPZ-1994-H43-T1b  
DS R AT; R BE; R CH; R DE; R DK; R ES; R FR; R GB; R GR; R IE; R IT; R LI;  
R LU; R NL; R PT; R SE  
PIT EPA1 EUROPAEISCHE PATENTANMELDUNG  
PI EP 621032 A1 19941026  
OD 19941026  
AI EP 1994-810212 19940414  
PRAI US 1993-52435 19930423  
US 1993-165437 19931210  
IC ICM A61K009-28  
ICS A61K009-00



L22 ANSWER 26 OF 36 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 1987:201741 CAPLUS  
DOCUMENT NUMBER: 106:201741  
TITLE: Delivery device for controlled release of an active ingredient  
INVENTOR(S): Eckenhoff, James B.; Cortese, Richard; Landrau, Felix A.  
PATENT ASSIGNEE(S): Alza Corp., USA  
SOURCE: Ger. Offen., 15 pp.  
CODEN: GWXXBX  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
INT. PATENT CLASSIF.:  
    MAIN: B01J004-00  
    SECONDARY: B01J004-04; A61K009-22; A61K009-52  
    ADDITIONAL: A61K031-13; A61K031-405; A61M005-14  
CLASSIFICATION: 63-6 (Pharmaceuticals)  
FAMILY ACC. NUM. COUNT: 3  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3625854	A1	19870219	DE 1986-3625854	19860730
DE 3625854	C2	19980409		
US 4692336	A	19870908	US 1985-763365	19850807
ES 556147	A1	19880401	ES 1986-556147	19860617
ES 556303	A1	19871016	ES 1986-556303	19860619
GB 2178656	A1	19870218	GB 1986-17905	19860722
GB 2178656	B2	19890906		
AU 8660614	A1	19870212	AU 1986-60614	19860728
AU 585775	B2	19890622		
GB 2178659	A1	19870218	GB 1986-18350	19860728
GB 2178659	B2	19890913		
JP 62039518	A2	19870220	JP 1986-178598	19860729
JP 08018972	B4	19960228		
DE 3625915	A1	19870219	DE 1986-3625915	19860731
DE 3625915	C2	19970424		
ZA 8605827	A	19870429	ZA 1986-5827	19860804
FR 2585950	A1	19870213	FR 1986-11370	19860806
FR 2585950	B1	19890303		
FR 2585949	A1	19870213	FR 1986-11369	19860806
FR 2585949	B1	19890303		
ZA 8605914	A	19870429	ZA 1986-5914	19860806
PRIORITY APPLN. INFO.:			US 1985-763365	19850807
			US 1984-590778	19840319
			US 1985-764143	19850809

ABSTRACT:

A delivery device for controlled release of an active ingredient such as a pharmaceutical or nutrient consists of a chamber (e.g. capsule-like), the inner space of which is filled with the active compd., a filler (expandable), a thermal energy absorber and carrier, and a material in the wall which allows controlled release of the active ingredient. A mixt. of Na Carbopol 934P carboxypolymethylene 270, NaCl 116, and Mg stearate 8 g was mixed with polyethylene glycol 400 5.51, ivermectin 1.04, and Cubosic 0.35 g at 49.degree.

and placed in a gelatin capsule. The capsule was then coated (0.2 mm) with a cellulose acetate butyrate (135 g) -polyethylene glycol (15g) mixt. The product released 0.2 mg ivermectin/h for .apprx.72 h.

SUPPL. TERM: capsule drug nutrient controlled release  
INDEX TERM: Acrylic polymers, biological studies  
Glycerides, biological studies  
Waxes and Waxy substances  
ROLE: BIOL (Biological study)  
(controlled-release pharmaceutical capsules contg.)  
INDEX TERM: Carbohydrates and Sugars, biological studies  
ROLE: BIOL (Biological study)  
(pharmaceutical capsules contg., for controlled-release)  
INDEX TERM: Pharmaceutical dosage forms  
(capsules, controlled-release, manuf. of and  
formulations  
for)  
INDEX TERM: 50-78-2 53-86-1, Indomethacin 557-04-0, Magnesium  
stearate 1343-98-2 6452-73-9, Oxprenolol hydrochloride  
7647-14-5, Sodium chloride, biological studies 9003-01-4,  
Polyacrylic acid 9003-05-8, Polyacrylamide  
9005-08-7 25053-81-0, Ethylene glycol  
monomethacrylate-ethylene glycol dimethacrylate copolymer  
25322-68-3, Polyethylene oxide 70288-86-7,  
Ivermectin 102640-11-9 107628-12-6  
ROLE: BIOL (Biological study)  
(controlled-release pharmaceutical capsules contg.)  
INDEX TERM: 57916-92-4  
ROLE: BIOL (Biological study)  
(controlled-release pharmaceutical contg.)  
INDEX TERM: 9004-35-7, Cellulose acetate 9004-36-8, Cellulose  
acetate butyrate 9004-38-0, Cellulose acetate phthalate  
70726-37-3, Cellulose propionate morpholinobutyrate  
ROLE: BIOL (Biological study)  
(microporous coatings contg., for controlled-release  
pharmaceutical capsules)

L22 ANSWER 23 OF 36 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 1989:82515 CAPLUS  
DOCUMENT NUMBER: 110:82515  
TITLE: Sustained-release implant for administering growth hormones  
INVENTOR(S): Shalati, Mohamad D.; Viswanathan, Ravi  
PATENT ASSIGNEE(S): International Minerals and Chemical Corp., USA  
SOURCE: U.S., 4 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
INT. PATENT CLASSIF.: A61K015-00; A61K021-00; A61K009-22  
MAIN: A61K009-00  
US PATENT CLASSIF.: 424468000  
CLASSIFICATION: 63-6 (Pharmaceuticals)  
Section cross-reference(s): 2  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
US 4761289	A	19880802	US 1986-917771	19861010
EP 326727	A1	19890809	EP 1988-300876	19880202
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
PRIORITY APPLN. INFO.:			US 1986-917771	19861010

ABSTRACT:

The title implants are prepd. by dispersing a water-diffusible solid in a soln. of a nonaq. solvent and a substantial water-insol. polymer, removing the nonaq. solvent to substantially dry the mixt., comminuting the dry mixt. to form particles, and pressing the particles together to form a pellet. Bovine growth hormone (800 mg) was suspended in .apprx.1.7 g CH<sub>2</sub>Cl<sub>2</sub> soln. contg. 141 mg of poly(lactic acid) (mol. wt. 15,600), the solvent evapd. under vacuum at room temp., 106 mg samples of material pressed into tablets, and the tablets coated with poly(lactic acid) and polycaprolactone.

SUPPL. TERM: sustained release growth hormone implant; bovine growth hormone sustained release  
INDEX TERM: Epoxy resins, biological studies  
Polyamides, biological studies  
Polycarbonates, biological studies  
Polyesters, biological studies  
Polysulfones, biological studies  
Siloxanes and Silicones, biological studies  
Urethane polymers, biological studies  
ROLE: BIOL (Biological study)  
(sustained-release pellet contg. growth hormone and, as implant)  
INDEX TERM: Ethers, polymers  
ROLE: BIOL (Biological study)  
(alkyl vinyl, polymers, sustained-release pellet contg. growth hormone and, as implant)  
INDEX TERM: Pharmaceutical dosage forms  
(implants, sustained-release, polymer matrix for)

INDEX TERM: Alkenes, polymers  
ROLE: BIOL (Biological study)  
(polymers, chlorosulfonated, sustained-release pellet  
contg. growth hormone and, as implant)

INDEX TERM: 9004-70-0, Cellulose nitrate  
ROLE: BIOL (Biological study)  
(biocompatible, sustained-release pellet contg. growth  
hormone and, as implant)

INDEX TERM: 25322-68-3, Polyethylene oxide  
ROLE: USES (Uses)  
(crosslinked, sustained-release pellet contg. growth  
hormone and, as implant)

INDEX TERM: 75-09-2, Methylene chloride, uses and miscellaneous  
ROLE: USES (Uses)  
(solvent, for sustained-release growth hormone implant  
pellet manuf.)

INDEX TERM: 24980-41-4, Polycaprolactone 25248-42-4, Polycaprolactone  
ROLE: BIOL (Biological study)  
(sustained-release pellet contg. bioactive protein and,  
as implant)

INDEX TERM: 534-15-6 9002-86-2, Polyvinyl chloride 9003-20-7,  
Polyvinyl acetate 9003-53-6, Polystyrene 9003-54-7,  
Acrylonitrile styrene copolymer 9004-38-0, Cellulose  
acetate phthalate 9004-39-1, Cellulose acetate propionate  
9012-09-3, Cellulose triacetate 9017-80-5,  
Polyvinylbenzyltrimethylammonium chloride 9032-35-3,  
Cellulose acetate succinate 9035-69-2, Cellulose  
diacetate 9040-62-4, Amylose triacetate 9041-69-4,  
Cellulose acetate p-toluene sulfonate 24981-14-4,  
Polyvinyl fluoride 25232-42-2, Polyvinylimidazole  
26009-03-0, Poly[oxy(1-oxo-1,2-ethanediyl)] 26124-68-5,  
Polyglycolic acid 39382-07-5, Cellulose acetate  
chloroacetate 62744-35-8, Poly(sodium styrene sulfonate)  
63340-54-5, .beta.-Glucan triacetate 97089-04-8,

Cellulose  
acetate ethyl carbamate 97089-05-9, Cellulose acetate  
methyl carbamate 116243-80-2 118440-35-0 118440-58-7  
118440-59-8 118440-60-1 118440-61-2 118441-60-4  
118441-64-8  
ROLE: BIOL (Biological study)  
(sustained-release pellet contg. growth hormone and, as  
implant)

INDEX TERM: 9004-35-7D, esters, ethers 9004-62-0D,  
Hydroxyethyl cellulose, acetylated  
ROLE: BIOL (Biological study)  
(sustained-release pellets contg. growth hormone and, as  
implants)

INDEX TERM: 9001-63-2, Lysozyme 9002-72-6, Somatotropin  
37267-05-3, Ovine growth hormone 66419-50-9, Bovine  
growth  
hormone  
ROLE: BIOL (Biological study)  
(sustained-release pellets contg., for implantation)

INDEX TERM: 24937-78-8, Ethylene-vinyl acetate copolymer  
ROLE: BIOL (Biological study)  
(sustained-release tablet contg. bioactive protein and,  
as implant)

INDEX TERM: 26023-30-3, Poly[oxy(1-methyl-2-oxo-1,2-ethanediyl)]  
26100-51-6, Polylactic acid  
ROLE: BIOL (Biological study)  
(sustained-release tablet contg. growth hormone and, as  
implant)

L22 ANSWER 20 OF 36 CAPLUS COPYRIGHT 2000 ACS  
 ACCESSION NUMBER: 1991:30169 CAPLUS  
 DOCUMENT NUMBER: 114:30169  
 TITLE: Water-dispersible polymeric compositions  
 INVENTOR(S): Wu, Stephen H. W.; Greene, Carol J.; Sharma, Mahendra K.  
 PATENT ASSIGNEE(S): Eastman Kodak Co., USA  
 SOURCE: U.S., 15 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 INT. PATENT CLASSIF.: G08L001-28; A61K009-32  
 US PATENT CLASSIF.: 524312000  
 CLASSIFICATION: 63-6 (Pharmaceuticals)  
 Section cross-reference(s): 62  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4960814	A	19901002	US 1988-205765	19880613
US 5025004	A	19910618	US 1990-532826	19900604
			US 1988-205765	19880613

PRIORITY APPLN. INFO.:

ABSTRACT:

Disclosed is a process for prepg. polymeric compns. which are suitable for coating medicaments or for use in cosmetic formulations. The process makes stable, colloidal, latex-like dispersions of coating polymers which can be readily dried to form polymeric powder materials. The process makes use of a novel combination of a water-in-oil emulsifier and an oil-in-water emulsifier. It comprises contacting an org. solvent system contg. .gtoreq.1 water-insol. polymer and .gtoreq.1 low-mol.-wt. volatile water-immiscible solvent, with a surfactant mixt. contg. .gtoreq.1 polymeric, water-sol. or -dispersible, nonionic, oil-in-water emulsifier and .gtoreq.1 water-insol., anionic or amphoteric water-in-oil emulsifier which is more hydrophobic than and compatible with the oil-in-water emulsifier and is dispersible in the solvent system. Thus, cellulose acetate phthalate was dissolved in EtOAc/Me2CHOH and to this was added Pluronic F127 and Emphos D70-30C. The soln. was then emulsified by addn. at H2O. Solvent was then removed and the dispersion was dried. The powder was then used in enteric coatings for aspirin tablets.

SUPPL. TERM: polymer coating dispersion pharmaceutical cosmetic  
 INDEX TERM: Acrylic polymers, biological studies  
 Lecithins  
 Lysophosphatidic acids  
 Lysophospholipids  
 Phosphatidic acids  
 Phospholipids, biological studies  
 Polyethers, uses and miscellaneous  
 Polymers, biological studies  
 Polyoxyalkylenes, uses and miscellaneous  
 ROLE: BIOL (Biological study)  
 (coating material manuf. with, for pharmaceuticals and cosmetics)  
 INDEX TERM: Cosmetics  
 (polymeric aq. dispersions in)  
 INDEX TERM: Glycerides, biological studies

INDEX TERM: ROLE: BIOL (Biological study)  
 (di-, phosphorylated, coating material manuf. with, for  
 pharmaceuticals and cosmetics)  
 INDEX TERM: Pharmaceutical dosage forms  
 (enteric-coated, manuf. of, polymeric dispersions for)  
 INDEX TERM: Sunburn and Suntan  
 (suntanning agents, manuf. of, polymeric dispersions  
 for)  
 INDEX TERM: 37259-90-8  
 ROLE: BIOL (Biological study)  
 (coating material manuf. with, for pharmaceuticals and  
 cosmetics)  
 INDEX TERM: 77-92-9D, Citric acid, monoglycerides 4345-03-3,  
 .alpha.-Tocopherol hemisuccinate 5793-94-2, Calcium  
 stearoyl lactylate 9003-53-6D, Polystyrene,  
 dimethylaminoethyl-modified 9003-54-7D,  
 Acrylonitrile-styrene copolymer, imiazoline-modified  
 9004-35-7 9004-36-8, Cellulose acetate butyrate  
 9004-38-0, Cellulose acetate phthalate 9004-39-1,  
 Cellulose acetate propionate 9004-57-3, Ethyl cellulose  
 9006-26-2, Ethylene-maleic anhydride copolymer 9010-88-2,  
 Ethyl acrylate-methyl methacrylate copolymer 9011-13-6,  
 Maleic anhydride-styrene copolymer 9011-16-9, Maleic  
 anhydride-methyl vinyl ether copolymer 9032-35-3,  
 Cellulose acetate succinate 9050-31-1, Hydroxypropyl  
 methyl cellulose phthalate 18200-72-1 24938-40-7,  
 2-Methyl-5-vinylpyridine-styrene copolymer 24980-54-9,  
 Styrene-2-vinylpyridine copolymer 25014-15-7,  
 Poly(2-vinylpyridine) 25038-59-9, Poly(ethylene  
 terephthalate), biological studies 25232-41-1,  
 Poly(4-vinylpyridine) 25496-72-4 27755-56-2,  
 Poly(2-vinyl-5-ethylpyridine) 52682-90-3 52907-01-4,  
 Cellulose acetate trimellitate 69865-27-6 70726-37-3,  
 Cellulose propionate morpholinobutyrate 81209-23-6,  
 Emphos  
 D70-30C 84419-85-2, Diethylaminomethyl cellulose  
 84419-89-6 84992-06-3 106392-12-5, Tergitol XH  
 ROLE: BIOL (Biological study)  
 (coating material prepn. with, for pharmaceuticals and  
 cosmetics)  
 INDEX TERM: 79-10-7D, Acrylic acid, esters, polymers 108-31-6D,  
 Maleic  
 anhydride, polymers 9003-47-8D, Poly(vinylpyridine),  
 derivs. 9003-53-6D, Polystyrene, derivs. 9004-34-6,  
 Cellulose, biological studies 9004-34-6D, Cellulose,  
 esters 9005-64-5 9005-67-8 9005-71-4  
 9019-70-9D, Styrene-vinylpyridine copolymer, derivs.  
 34346-01-5D, Glycolic acid-lactic acid copolymer, derivs.  
 106392-12-5, Poloxamer  
 ROLE: BIOL (Biological study)  
 (coating materials contg., for pharmaceuticals and  
 cosmetics)  
 INDEX TERM: 50-78-2, Aspirin 56592-32-6, Efrotomycin  
 ROLE: BIOL (Biological study)  
 (enteric coating for, polymer compns. for)  
 INDEX TERM: 131-57-7, 2-Hydroxy-4-methoxy benzophenone  
 ROLE: BIOL (Biological study)  
 (in aq. dispersions of water-insol. polymers for suntan  
 lotion)

L22 ANSWER 18 OF 36 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 1993:27464 CAPLUS  
DOCUMENT NUMBER: 118:27464  
TITLE: Method for production of solid pharmaceutical dosage forms  
INVENTOR(S): Molloy, Thomas Patrick; Lee, David; Chopra, Sham Kumar  
PATENT ASSIGNEE(S): Glaxo Canada Inc., Can.  
SOURCE: PCT Int. Appl., 30 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
INT. PATENT CLASSIF.:  
MAIN: A61K009-28  
SECONDARY: A61K009-20  
CLASSIFICATION: 63-6 (Pharmaceuticals)  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9211845	A1	19920723	WO 1992-CA4	19920103
W: AT, AU, BB, BG, BR, CA, CH, CS, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MG, MN, MW, NL, NO, PL, RO, RU, SD, SE, US				
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GN, GR, IT, LU, MC, ML, MR, NL, SE, SN, TD, TG				
CA 2100272	AA	19920704	CA 1992-2100272	19920103
AU 9211587	A1	19920817	AU 1992-11587	19920103
AU 657514	B2	19950316		
EP 565560	A1	19931020	EP 1992-901671	19920103
EP 565560	B1	19940928		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, SE				
JP 06504276	T2	19940519	JP 1992-502025	19920103
ES 2060465	T3	19941116	ES 1992-901671	19920103
PRIORITY APPLN. INFO.:				
			GB 1991-40	19910103
			GB 1991-17525	19910814
			WO 1992-CA4	19920103

ABSTRACT:

Solid pharmaceuticals are prepd. by mixing finely divided particles or granules contg. a drug, excipients and amorphous coating polymers and plasticizers and compressing them into tablets. Thus, a water dispersible formulation of Aquateric 85 g and glyceryl stearate 15 g and Mg stearate 0.1 g (as a lubricant) was mixed and this mixt. was used to encapsulate aspirin tablets (350 mg). The diam. of each coated tablet was 12 mm. The tablet was heated at 80-90.degree. for 15-20 min to allow the polymer particles to fuse together to form a continuous film. The film coated tablets were tested for enteric integrity using the USP procedure. The tablets were intact in simulated gastric fluid for >2 h and dissolved in <30 min in the intestinal medium.

SUPPL. TERM: solid pharmaceutical polymer plasticizer; tablet polymer plasticizer  
INDEX TERM: Solution rate  
(of drugs, from solid pharmaceutical dosage forms)  
INDEX TERM: Plasticizers

(solid pharmaceutical dosage forms contg. polymers and, prodn. of)

INDEX TERM: Polymers, biological studies  
 ROLE: BIOL (Biological study)  
 (solid pharmaceutical dosage forms contg., prodn. of)

INDEX TERM: Pharmaceutical dosage forms  
 (solids, polymers- and plasticizers-contg., prodn. of)

INDEX TERM: Pharmaceutical dosage forms  
 (tablets, polymers- and plasticizers-contg., prodn. of)

INDEX TERM: 9003-39-8P, Poly(vinylpyrrolidone) **9004-35-7P**  
 9004-38-0P, Cellulose acetate phthalate 9050-31-1P,  
 Hydroxypropyl methyl cellulose phthalate 25086-15-1P,  
 Eudragit L100 74811-65-7P, Acdisol  
 ROLE: PREP (Preparation)  
 (solid pharmaceutical dosage forms contg. plasticizers and, prodn. of)

INDEX TERM: 7647-14-5P, Sodium chloride, biological studies  
 7778-18-9P, Calcium sulfate 50-78-2P, Aspirin  
**9005-65-6P**, Polyoxyethylene sorbitan monooleate  
 51022-70-9P, Salbutamol sulfate  
 ROLE: BIOL (Biological study); PREP (Preparation)  
 (solid pharmaceutical dosage forms contg. polymers and plasticizers and, prodn. of)

INDEX TERM: **77-93-0P**, Triethyl citrate 84-66-2P, Diethyl phthalate 97-64-3P, Ethyl lactate **102-76-1P**  
 109-43-3P, Dibutyl sebacate  
 ROLE: PREP (Preparation)  
 (solid pharmaceutical dosage forms contg. polymers and, prodn. of)



L22 ANSWER 17 OF 36 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 1993:66863 CAPLUS  
DOCUMENT NUMBER: 118:66863  
TITLE: Enteric-coated oral pharmaceutical compositions  
containing glycosaminoglycans  
INVENTOR(S): Cristofori, Manilo; Marchi, Egidio; Rotini, Leone  
Gabrielle  
PATENT ASSIGNEE(S): Alfa Wassermann S.p.A., Italy  
SOURCE: Eur. Pat. Appl., 17 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
INT. PATENT CLASSIF.: A61K031-725; A61K009-20; A61K009-28; A61K009-48;  
A61K009-14  
CLASSIFICATION: 63-6 (Pharmaceuticals)  
Section cross-reference(s): 1  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
EP 497162	A1	19920805	EP 1992-100732	19920117
EP 497162	B1	19960807		
R: BE, DE, ES, FR, GB, NL, SE				
US 5252339	A	19931012	US 1992-821455	19920115
ES 2090368	T3	19961016	ES 1992-100732	19920117
CA 2059865	AA	19920731	CA 1991-2059865	19920122
JP 05043471	A2	19930223	JP 1992-13943	19920129
JP 07055907	B4	19950614		
PRIORITY APPLN. INFO.:			IT 1991-BO24	19910130

ABSTRACT:

Enteric-coated oral pharmaceuticals contg. a glycosaminoglycan lyophilizate, a thickening agent, and surfactants are disclosed. To 100mL of a soln. contg. xanthan gum 100, saccharose monopalmitate 250, Na laurylsarcosinate 250mg was added a soln. of 500mg sulodexide in 20mL water. and the resulting soln. was freeze-dried. The lyophilizate with surfactants and thickening agents were incorporated into enteric coated-tablets. The fibrinolytic activity of the compn. was studied in volunteers.

SUPPL. TERM: enteric coated pharmaceutical compn glycosaminoglycan;  
suloxide enteric coated tablet xanthan; saccharose  
palmitate

INDEX TERM: suloxide enteric coated tablet  
Glycosaminoglycans, biological studies  
ROLE: BIOL (Biological study)  
(enteric-coated pharmaceutical compn. contg.)

INDEX TERM: Surfactants  
Thickening agents  
Bile salts  
Carboxylic acids, biological studies  
Caseins, biological studies  
Gelatin, biological studies  
Phospholipids, biological studies  
ROLE: BIOL (Biological study)  
(enteric-coated pharmaceutical compn. of  
glycosaminoglycans contg.)

INDEX TERM:       Antiartherosclerotics  
                   Anticoagulants and Antithrombotics  
                   (glycosaminoglycans)  
 INDEX TERM:       Pharmaceutical dosage forms  
                   (capsules, enteric-coated, of glycosaminoglycans and  
                   thickeners and surfactants)  
 INDEX TERM:       Oligosaccharides  
                   ROLE: BIOL (Biological study)  
                   (di-, esters, with fatty acids, enteric-coated  
                   pharmaceutical compn. of glycosaminoglycans contg.)  
 INDEX TERM:       Monosaccharides  
                   ROLE: BIOL (Biological study)  
                   (esters, with fatty acids, enteric-coated pharmaceutical  
                   compn. of glycosaminoglycans contg.)  
 INDEX TERM:       Fatty acids, esters  
                   ROLE: BIOL (Biological study)  
                   (esters, with saccharides and ethoxylated alcs.,  
                   enteric-coated pharmaceutical compn. of  
                   glycosaminoglycans contg.)  
 INDEX TERM:       Alcohols, compounds  
                   ROLE: BIOL (Biological study)  
                   (ethoxylated, with fatty acids, enteric-coated  
                   pharmaceutical compn. of glycosaminoglycans contg.)  
 INDEX TERM:       Castor oil  
                   ROLE: BIOL (Biological study)  
                   (hydrogenated, enteric-coated pharmaceutical compn. of  
                   glycosaminoglycans contg.)  
 INDEX TERM:       Glycerides, compounds  
                   ROLE: BIOL (Biological study)  
                   (mono-, acetates, enteric-coated pharmaceutical compn.  
 of  
                   glycosaminoglycans contg.)  
 INDEX TERM:       Pharmaceutical dosage forms  
                   (tablets, enteric-coated, of glycosaminoglycans and  
                   thickeners and surfactants)  
 INDEX TERM:       9041-08-1, Sodium heparin   24967-94-0, Dermatan sulfate  
                   57821-29-1, Sulodexide   9005-49-6, Heparin, uses  
                   9005-49-6D, Heparin, alkali and alk.-earth salts  
                   ROLE: BIOL (Biological study)  
                   (enteric-coated pharmaceutical compn. contg.)  
 INDEX TERM:       84-66-2, Diethylphthalate 102-76-1, Triacetin  
                   145-42-6, Sodium taurocholate   361-09-1, Sodium cholate  
                   863-57-0, Sodium glycocholate   7631-98-3, Sodium  
                   laurylsarcosinate   7664-93-9D, Sulfuric acid, derivs.  
                   9000-01-5, Gum arabic   9000-07-1, Carrageenan   9000-65-1,  
                   Gum tragacanth   9000-69-5, Pectin   9002-89-5, Poly(vinyl  
                   alcohol)   9003-39-8, Pvp   9004-32-4, Carboxymethyl  
                   cellulose 9004-35-7, Cellulose acetate  
                   9004-62-0, Hydroxyethyl cellulose   9004-64-2,  
 Hydroxypropyl  
                   cellulose   9004-67-5, Methyl cellulose   9005-25-8,  
 Starch,  
                   uses   9005-32-7D, Alginic acid, derivs. 9005-63-4D  
                   , derivs.   9007-20-9, Carbopol   9065-11-6, Eudragit  
                   11138-66-2, Xanthan gum   13419-15-3 25322-68-3,  
                   Polyethylene glycol   26446-38-8, Saccharose monopalmitate  
                   53237-50-6  
                   ROLE: BIOL (Biological study)  
                   (enteric-coated pharmaceutical compn. of  
                   glycosaminoglycans contg.)

L22 ANSWER 6 OF 36 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 1998:485114 CAPLUS  
DOCUMENT NUMBER: 129:136909  
TITLE: Preparation of biodegradable polymer dispersions and their use  
INVENTOR(S): Peltonen, Soili; Heikkila, Maija Elina; Mikkonen, Hannu; Hamara, Jouni  
PATENT ASSIGNEE(S): Valtion Teknillinen Tutkimuskeskus, Finland  
SOURCE: PCT Int. Appl., 27 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
INT. PATENT CLASSIF.:  
MAIN: C08J003-03  
SECONDARY: C08L003-00  
CLASSIFICATION: 37-6 (Plastics Manufacture and Processing)  
Section cross-reference(s): 38, 42, 43  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9829477	A1	19980709	WO 1997-FI837	19971231
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
FI 9605305	A	19980701	FI 1996-5305	19961231
AU 9853242	A1	19980731	AU 1998-53242	19971231
EP 950074	A1	19991020	EP 1997-950215	19971231
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
PRIORITY APPLN. INFO.:			FI 1996-5305	19961231
			WO 1997-FI837	19971231

ABSTRACT:

A mixt. is first formed of a biodegradable polymer component, a plasticizer, dispersion auxiliaries, and water, the mixt. is then heated to .apprx.20-100.degree. in order to form a paste-like compn., and the paste-like compn. is dispersed in water. The dispersion can be used for coating paper or board, as a primer, and as a component in adhesives, paint, or lacquer, and it is also suited for the manuf. of cast films and for use as a binder in materials based on cellulosic fibers. A dispersion typically contained starch acetate 50.0, Mowiol 5, Tween 21 1.2, triacetin 50, and water 100 g.

SUPPL. TERM: biodegradable polymer dispersion  
INDEX TERM: Tall oil rosin  
ROLE: MOA (Modifier or additive use); USES (Uses)  
(Oulu 331; prepn. and use of biodegradable polymer dispersions contg.)  
INDEX TERM: Aminoplasts  
ROLE: MOA (Modifier or additive use); USES (Uses)  
(crosslinker; prepn. and use of biodegradable polymer

dispersions contg.)

INDEX TERM: Beeswax  
(dispersion auxiliary; prepn. and use of biodegradable polymer dispersions contg.)

INDEX TERM: Carnauba wax  
ROLE: MOA (Modifier or additive use); USES (Uses)  
(dispersion auxiliary; prepn. and use of biodegradable polymer dispersions contg.)

INDEX TERM: Polyesters, uses  
ROLE: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)  
(hydroxycarboxylic acid-based; prepn. and use of biodegradable polymer dispersions contg.)

INDEX TERM: Polyesters, uses  
ROLE: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)  
(lactic acid-based; prepn. and use of biodegradable polymer dispersions contg.)

INDEX TERM: Castor oil  
Glycerides, uses  
Olive oil  
Rape oil  
Tall oil  
ROLE: MOA (Modifier or additive use); USES (Uses)  
(plasticizers; prepn. and use of biodegradable polymer dispersions contg.)

INDEX TERM: Cellulosic fibers  
ROLE: TEM (Technical or engineered material use); USES (Uses)  
(prepn. and use of biodegradable polymer dispersion binders for)

INDEX TERM: Soaps  
ROLE: MOA (Modifier or additive use); USES (Uses)  
(prepn. and use of biodegradable polymer dispersions contg.)

INDEX TERM: Polyester-polyurethanes  
Polyesters, uses  
ROLE: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)  
(prepn. and use of biodegradable polymer dispersions contg.)

INDEX TERM: Binders  
Water-thinned adhesives  
Water-thinned coatings  
(prepn. and use of biodegradable polymer dispersions for)

INDEX TERM: Lipids, uses  
ROLE: MOA (Modifier or additive use); USES (Uses)  
(sugar-based, surfactants; prepn. and use of biodegradable polymer dispersions contg.)

INDEX TERM: Alkanesulfonates  
Fatty amides  
Fatty amines  
Lecithins  
Phospholipids, uses  
Saponins  
ROLE: MOA (Modifier or additive use); USES (Uses)  
(surfactants; prepn. and use of biodegradable polymer dispersions contg.)

INDEX TERM: Alkyd resins  
ROLE: MOA (Modifier or additive use); USES (Uses)  
(tall oil-based, Finnresin TIA-8700; prepn. and use of biodegradable polymer dispersions contg.)

INDEX TERM: 54386-22-0, Hydroxypropyl starch acetate  
ROLE: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

INDEX TERM: (Cohpol EP-C 6M100; prepn. and use of biodegradable polymer dispersions contg.)  
9045-28-7, Starch acetate  
ROLE: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)  
(Cohpol; prepn. and use of biodegradable polymer dispersions contg.)

INDEX TERM: 13963-57-0, Aluminum acetylacetonate  
ROLE: CAT (Catalyst use); USES (Uses)  
(crosslinker; prepn. and use of biodegradable polymer dispersions contg.)

INDEX TERM: 107-22-2, Glyoxal 9003-08-1, Cymel 303 9011-05-6, Dynomin UM 15 40094-65-3 210416-26-5, Additol VXW 4940  
ROLE: MOA (Modifier or additive use); USES (Uses)  
(crosslinker; prepn. and use of biodegradable polymer dispersions contg.)

INDEX TERM: 7440-67-7D, Zirconium, salts  
ROLE: CAT (Catalyst use); USES (Uses)  
(crosslinkers; prepn. and use of biodegradable polymer dispersions contg.)

INDEX TERM: 9005-64-5, Tween 21 9005-65-6, Tween 81  
210415-94-4, 2980BA 210416-14-1, Lipotin A  
ROLE: MOA (Modifier or additive use); USES (Uses)  
(emulsifier; prepn. and use of biodegradable polymer dispersions contg.)

INDEX TERM: 102-76-1, Triacetin  
ROLE: MOA (Modifier or additive use); USES (Uses)  
(plasticizer, Priacetin 1581; prepn. and use of biodegradable polymer dispersions contg.)

INDEX TERM: 77-89-4, Citroflex A 2 77-90-7, Acetyl tributyl citrate 77-93-0, Triethyl citrate 77-94-1, Tributyl citrate 84-66-2, Diethyl phthalate 84-74-2, Dibutyl phthalate 97-64-3, Ethyl lactate 106-65-0, Dimethyl succinate 123-25-1, Diethyl succinate 547-64-8, Methyl lactate 25395-31-7, Diacetin 26446-35-5, Monoacetin  
ROLE: MOA (Modifier or additive use); USES (Uses)  
(plasticizer; prepn. and use of biodegradable polymer dispersions contg.)

INDEX TERM: 210416-25-4, TTE 00  
ROLE: MOA (Modifier or additive use); USES (Uses)  
(prepn. and use of biodegradable polymer dispersions contg.)

INDEX TERM: 9002-89-5, Mowiol 9004-35-7, Cellulose acetate 9005-25-8D, Starch, esters 9049-76-7, Cohpol LL 100 24980-41-4, Polycaprolactone 25248-42-4, Polycaprolactone 26023-30-3, Poly[oxy(1-methyl-2-oxo-1,2-ethanediyl)] 26100-51-6, Lactic acid homopolymer 26680-10-4, Polylactide 80181-31-3 210416-19-6, Baystal P 8-522  
ROLE: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)  
(prepn. and use of biodegradable polymer dispersions contg.)

INDEX TERM: 98-11-3D, Benzenesulfonic acid, alkyl derivs., salts 107-97-1D, Sarcosine, salts 8062-15-5D, Lignosulfonic acid, salts  
ROLE: MOA (Modifier or additive use); USES (Uses)  
(surfactants; prepn. and use of biodegradable polymer dispersions contg.)

INDEX TERM: 674-82-8D, Ketene dimer, alkyl derivs.  
ROLE: MOA (Modifier or additive use); USES (Uses)  
(wax, surfactants; prepn. and use of biodegradable polymer dispersions contg.)

L9 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2000 ACS  
RN 9005-71-4 REGISTRY  
CN Sorbitan, trioctadecanoate, poly(oxy-1,2-ethanediyl) derivs. (9CI) (CA  
INDEX NAME)

OTHER CA INDEX NAMES:  
CN Sorbitan, tristearate, polyoxyethylene derivs. (8CI)

OTHER NAMES:

CN Ahco 7166T  
CN Emsorb 6907  
CN Ethoxylated sorbitan tristearate  
CN Glycosperse TS 20  
CN Liposorb TS 20  
CN Montanox 65  
CN Nikkol TS 30  
CN Poly(oxyethylene) sorbitan tristearate  
CN Polyethylene glycol sorbitan ether tristearate  
CN Polyethylene glycol sorbitan tristearate  
CN Polyethylene glycol sorbitan tristearate ether  
CN **Polyoxyethylene 20 sorbitan tristearate**  
CN Polysorbate 65  
CN Rheodol TW-S 320  
CN Sorbimacrogol tristearate 300  
CN T-MAZ 65K  
CN Tween 65  
DR 9015-61-6  
MF Unspecified  
CI PMS, COM, MAN  
PCT Manual registration  
LC STN Files: ANABSTR, BIOBUSINESS, BIOSIS, CA, CAPLUS, CHEMCATS,  
CHEMLIST,

CIN, CSCHEM, CSNB, EMBASE, IFICDB, IFIPAT, IFIUDB, PIRA, RTECS\*,  
TOXLINE, TOXLIT, USAN, USPATFULL  
(\*File contains numerically searchable property data)  
Other Sources: DSL\*\*, TSCA\*\*  
(\*\*Enter CHEMLIST File for up-to-date regulatory information)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*  
305 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
307 REFERENCES IN FILE CAPLUS (1967 TO DATE)

=> d 1-

YOU HAVE REQUESTED DATA FROM 2 ANSWERS - CONTINUE? Y/(N):Y

L9 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2000 ACS  
RN 9005-71-4 REGISTRY  
CN Sorbitan, trioctadecanoate, poly(oxy-1,2-ethanediyl) derivs. (9CI) (CA  
INDEX NAME)

OTHER CA INDEX NAMES:  
CN Sorbitan, tristearate, polyoxyethylene derivs. (8CI)

OTHER NAMES:

CN Ahco 7166T  
CN Emsorb 6907

CN Ethoxylated sorbitan tristearate  
 CN Glycosperse TS 20  
 CN Liposorb TS 20  
 CN Montanox 65  
 CN Nikkol TS 30  
 CN Poly(oxyethylene) sorbitan tristearate  
 CN Polyethylene glycol sorbitan ether tristearate  
 CN Polyethylene glycol sorbitan tristearate  
 CN Polyethylene glycol sorbitan tristearate ether  
 CN **Polyoxyethylene 20 sorbitan tristearate**  
 CN Polysorbate 65  
 CN Rheodol TW-S 320  
 CN Sorbimacrogol tristearate 300  
 CN T-MAZ 65K  
 CN Tween 65  
 DR 9015-61-6  
 MF Unspecified  
 CI PMS, COM, MAN  
 PCT Manual registration  
 LC STN Files: ANABSTR, BIOBUSINESS, BIOSIS, CA, CAPLUS, CHEMCATS,  
 CHEMLIST,  
 CIN, CSCHEM, CSNB, EMBASE, IFICDB, IFIPAT, IFIUDB, PIRA, RTECS\*,  
 TOXLINE, TOXLIT, USAN, USPATFULL  
 (\*File contains numerically searchable property data)  
 Other Sources: DSL\*\*, TSCA\*\*  
 (\*\*Enter CHEMLIST File for up-to-date regulatory information)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*  
 305 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 307 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L9 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2000 ACS  
 RN 8050-72-4 REGISTRY  
 CN Sorbitan, trioctadecanoate, poly(oxy-1,2-ethanediyl) derivs., mixt. with  
 sorbitan monooctadecanoate poly(oxy-1,2-ethanediyl) derivs. and  
 (Z)-sorbitan mono-9-octadecenoate poly(oxy-1,2-ethanediyl) derivs. (9CI)  
 (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Sorbitan, mono-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs., (Z)-,  
 mixt. contg. (9CI)  
 CN Sorbitan, monooctadecanoate, poly(oxy-1,2-ethanediyl) derivs., mixt.  
 contg. (9CI)  
 OTHER NAMES:  
 CN **Polyoxyethylene (20) sorbitan tristearate; polysorban 80;**  
**polyoxyethylene (20) sorbitan monostearate**  
 MF Unspecified . Unspecified . Unspecified  
 CI MXS

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2000 ACS  
RN 9004-35-7 REGISTRY  
CN Cellulose, acetate (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Cellulose acetate (8CI)

OTHER NAMES:

CN A 432-130B  
CN A 50T  
CN A 50T (cellulose derivative)  
CN AC 311075  
CN AC 398-10  
CN AC 61  
CN AC 61 (cellulose derivative)  
CN Aceplast LS  
CN Acetate cellulose  
CN Acetate cotton  
CN Acetate ester of cellulose  
CN Acetic acid, cellulose ester  
CN Acetol RIB  
CN Acetose  
CN Acetyl 35  
CN Acetylcellulose  
CN Allogel  
CN Amicon YM 10  
CN Ampacet C/A  
CN Asechi  
CN Asechi H  
CN ATs 1-2  
CN Bioden  
CN CA 100  
CN CA 2-3X  
CN CA 394  
CN CA 398-3  
CN CA 398-30  
CN CA 398-6  
CN CA 600PP  
CN CA 990  
CN CA 995  
CN CA 999  
CN CAE 398-3  
CN Cellidor  
CN Cellidor A  
CN Cellidor AW  
CN Cellidor S  
CN Cellidor SM 15  
CN Cellidor U  
CN Cellit K 700  
CN Cellit K 900  
CN Cellit L 700  
CN Cellit T  
CN Cellogel RS  
CN Cellulflow TA 25  
CN Celotate EHWP 04700  
CN Clarifoil 20MaTT/POLL  
CN Crelate

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for

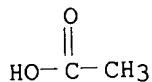


DISPLAY  
 DR 58318-12-0, 58517-16-7, 125807-44-5, 120300-14-3, 3288-81-9,  
 50806-92-3,  
 66419-14-5, 70992-66-4, 71812-17-4, 155860-40-5, 81210-20-0, 81210-21-1,  
 87582-55-6  
 MF C2 H4 O2 . x Unspecified  
 CI COM  
 PCT Manual registration, Polyother, Polyother only  
 LC STN Files: AGRICOLA, ANABSTR, APILIT, APILIT2, APIPAT, APIPAT2,  
 BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAPLUS, CASREACT,  
 CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSCHM, CSNB, DDFU, DETHERM\*,  
 DRUGU,  
 EMBASE, HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MSDS-OHS,  
 NIOSHTIC,  
 PDLCOM\*, PIRA, PROMT, TOXLINE, TOXLIT, TULSA, USAN, USPATFULL, VTB  
 (\*File contains numerically searchable property data)  
 Other Sources: DSL\*\*, TSCA\*\*  
 (\*\*Enter CHEMLIST File for up-to-date regulatory information)  
  
 CM 1  
  
 CRN 9004-34-6  
 CMF Unspecified  
 CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

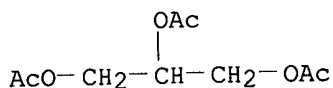
CM 2

CRN 64-19-7  
 CMF C2 H4 O2



10102 REFERENCES IN FILE CA (1967 TO DATE)  
 278 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 10115 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2000 ACS  
 RN 102-76-1 REGISTRY  
 CN 1,2,3-Propanetriol, triacetate (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Acetin, tri- (6CI, 8CI)  
 OTHER NAMES:  
 CN 1,2,3-Triacetoxyp propane  
 CN Enzactin  
 CN Estol 1581  
 CN Fungacetin  
 CN Glycerin triacetate  
 CN Glycerol triacetate  
 CN Glyceryl triacetate  
 CN Glyped  
 CN Kesscoflex TRA  
 CN Priacetin 1580  
 CN Priacetin 1581  
 CN **Triacetin**  
 CN Triacetine  
 CN Triacetyl glycerin  
 CN Triacetyl glycerol  
 CN Ujostabil  
 CN Vanay  
 FS 3D CONCORD  
 MF C9 H14 O6  
 CI COM  
 LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS,  
 BIOTECHNO, CA, CABA, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS,  
 CHEMLIST, CHEMSAFE, CIN, CSCHEM, DDFU, DETHERM\*, DIPPR\*, DRUGU, EMBASE,  
 HODOC\*, HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS,  
 NAPRALERT, NIOSHTIC, PDLCOM\*, PIRA, PROMT, RTECS\*, SPECINFO, TOXLINE,  
 TOXLIT, TULSA, USAN, USPATFULL, VTB  
 (\*File contains numerically searchable property data)  
 Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*, WHO  
 (\*\*Enter CHEMLIST File for up-to-date regulatory information)



1754 REFERENCES IN FILE CA (1967 TO DATE)  
 12 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 1763 REFERENCES IN FILE CAPLUS (1967 TO DATE)  
 104 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L15 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2000 ACS

RN 9004-57-3 REGISTRY

CN Cellulose, ethyl ether (8CI, 9CI) (CA INDEX NAME)

OTHER NAMES:

CN Ampacet E/C

CN Aquacoat

CN Aquacoat EC 30D

CN Aquacoat ECD 30

CN Aquacoat ECD 30FMC

CN Aqualon NF

CN Cellulose ethyl

CN Cellulose ethylate

CN EC-N 100

CN ECN 10

CN EHEC X-high

CN ET 100

CN ET 100 (cellulose derivative)

CN Ethocel

CN Ethocel 10

CN Ethocel 100

CN Ethocel 150

CN Ethocel 350

CN Ethocel 7CP

CN Ethocel 890

CN Ethocel CP 10

CN Ethocel E

CN Ethocel E 50

CN Ethocel E 7

CN Ethocel HE350

CN Ethocel MED

CN Ethocel N 10

CN Ethocel N 100

CN Ethocel N 200

CN Ethocel N 7

CN Ethocel S 100

CN Ethocel S 20

CN Ethocel S 50

CN Ethocel STD

CN Ethocel STD 100

CN Ethocel STD 100CPS

CN Ethocel STD 100FP

CN Ethocel STD 4

CN Ethocel STD 45

CN Ethocel STD 45CPS

CN Ethocel STD 7CPS

CN Ethocel STDS 10CPS

CN Ethyl cellulose ether

CN Ethyl Cellulose N-200

CN Ethylcellulose

CN ETs

CN ETs (polysaccharide)

CN G 200

CN G 200 (polysaccharide)

CN G 50

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for

DISPLAY  
DR 11097-03-3, 1667-68-8, 57307-96-7, 51331-16-9  
MF C2 H6 O . x Unspecified  
CI COM  
PCT Manual registration, Polyether, Polyether only  
LC STN Files: AGRICOLA, APILIT, APILIT2, APIPAT, APIPAT2, BIOBUSINESS,  
BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CBNB, CEN, CHEMCATS,  
CHEMLIST,  
CIN, CSCHM, CSNB, DDFU, DRUGU, EMBASE, HSDB\*, IFICDB, IFIPAT, IFIUDB,  
IPA, MEDLINE, MRCK\*, MSDS-OHS, NIOSHTIC, PDLCOM\*, PIRA, PROMT, RTECS\*,  
TOXLINE, TOXLIT, TULSA, USAN, USPATFULL, VTB  
(\*File contains numerically searchable property data)  
Other Sources: DSL\*\*, TSCA\*\*  
(\*\*Enter CHEMLIST File for up-to-date regulatory information)

CM 1

CRN 9004-34-6  
CMF Unspecified  
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 64-17-5  
CMF C2 H6 O

H<sub>3</sub>C-CH<sub>2</sub>-OH

6234 REFERENCES IN FILE CA (1967 TO DATE)  
98 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
6253 REFERENCES IN FILE CAPLUS (1967 TO DATE)

=> d 116

YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:y

L16 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2000 ACS  
RN 9004-64-2 REGISTRY  
CN Cellulose, 2-hydroxypropyl ether (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN 2-Hydroxypropyl cellulose  
CN Aqualon Klucel L  
CN Cellulose hydroxypropyl ether  
CN EF 10  
CN EF 10 (cellulose derivative)  
CN Fuji HEC-SG 25F  
CN G 4000HXL  
CN HPC  
CN HPC-E  
CN HPC-E (cellulose derivative)  
CN HPC-EF-G  
CN HPC-H  
CN HPC-L  
CN HPC-LE-G  
CN HPC-LG  
CN HPC-LR  
CN HPC-M  
CN HPC-MF

CN HPC-MG  
 CN HPC-S  
 CN HPC-SL  
 CN Hydropropyl cellulose  
 CN **Hydroxypropyl cellulose**  
 CN Hydroxypropyl cellulose ether  
 CN Hydroxypropyl ether of cellulose  
 CN Hyprolose  
 CN JK 491  
 CN Klucel  
 CN Klucel 99E  
 CN Klucel 99EF  
 CN Klucel 99G  
 CN Klucel 99GF-EP  
 CN Klucel 99M  
 CN Klucel E  
 CN Klucel E 5  
 CN Klucel EEL  
 CN Klucel EF  
 CN Klucel G  
 CN Klucel Gf  
 CN Klucel H  
 CN Klucel HF  
 CN Klucel HF-NF  
 CN Klucel HW  
 CN Klucel HXF  
 CN Klucel J  
 CN Klucel JF  
 CN Klucel KL  
 CN Klucel L  
 CN Klucel LF  
 CN Klucel M

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for  
 DISPLAY

DR 9076-24-8, 173523-78-9, 65742-73-6, 78214-41-2, 150873-09-9, 192006-47-6,  
 193561-69-2, 210920-15-3

MF C3 H8 O2 . x Unspecified

CI COM

PCT Manual registration, Polyother, Polyother only

LC STN Files: AGRICOLA, AIDSLINE, BIOBUSINESS, BIOSIS, BIOTECHNO, CA,  
 CANCERLIT, CAPLUS, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DRUGU,  
 EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, PIRA,  
 PROMT, RTECS\*, TOXLINE, TOXLIT, TULSA, USAN, USPATFULL, VTB  
 (\*File contains numerically searchable property data)

Other Sources: DSL\*\*, TSCA\*\*  
 (\*\*Enter CHEMLIST File for up-to-date regulatory information)

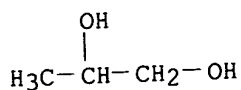
CM 1

CRN 9004-34-6  
 CMF Unspecified  
 CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 57-55-6  
 CMF C3 H8 O2



5348 REFERENCES IN FILE CA (1967 TO DATE)  
140 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
5375 REFERENCES IN FILE CAPLUS (1967 TO DATE)

=> d 117

YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:y

L17 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2000 ACS

RN 9004-99-3 REGISTRY

CN Poly(oxy-1,2-ethanediyl), .alpha.-(1-oxooctadecyl)-.omega.-hydroxy- (9CI)  
(CA INDEX NAME)

OTHER NAMES:

CN 40S  
CN 40S (polyether)  
CN 60S  
CN 60S (lubricant)  
CN Akyporox S 100  
CN Alkasurf S 65-8  
CN Arosurf 1855E40  
CN Atlox 5000  
CN Capcure 65  
CN Carbowax 1000 monostearate  
CN Carbowax 1500 monostearate  
CN Carbowax 4000 monostearate  
CN Cerasynt 660  
CN Cerasynt M  
CN Cerasynt MN  
CN Chemax E 1750MS  
CN Chemax E 400MS  
CN Cithrol 10MS  
CN Cithrol 4MS  
CN Cithrol PS  
CN Clearate G  
CN Cremofor 410R  
CN Cremophor 410R  
CN Cremophor S 9  
CN Crill 20  
CN Crill 21  
CN Crill 22  
CN Crill 23  
CN Crodet S  
CN Crodet S 100  
CN Crodet S 24  
CN Emalex 605  
CN Emalex 804  
CN Emanon 3113  
CN Emanon 3115  
CN Emanon 3119  
CN Emanon 3170  
CN Emanon 3199  
CN Emcol H 35A  
CN Emerest 2640  
CN Emerest 2662  
CN Emerest 2715  
CN Emery 15393  
CN Empilan CP 100  
CN Empilan CQ 100  
CN Ethofat 60/15  
CN Ethofat 60/20  
CN Ethofat 60/25  
CN Ethoxylated stearic acid

CN Eumulgin ST 8

CN Polyoxyl 40 Stearate

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCID, FIDE, or ALL for  
DISPLAY

DR 8035-96-9, 8050-55-3, 9009-90-9, 11107-94-1, 11108-48-8, 58375-39-6,  
123543-87-3, 121340-91-8, 63654-37-5, 35885-17-7, 72993-78-3, 74870-86-3,  
86473-52-1, 39404-30-3, 42610-76-4, 52504-21-9, 52504-22-0, 52504-23-1

MF (C2 H4 O)n C18 H36 O2

CI PMS, COM

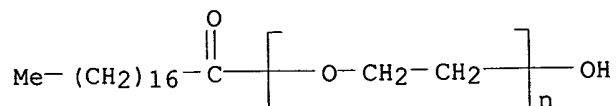
PCT Polyether

LC STN Files: BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAPLUS, CHEMCATS,  
CHEMLIST, CIN, CSCHM, DDFU, DRUGU, EMBASE, HSDB\*, IFICDB, IFIPAT,  
IFIUDB, IPA, MEDLINE, MSDS-OHS, NIOSHTIC, PROMT, RTECS\*, TOXLINE,  
TOXLIT, USAN, USPATFULL

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)



2261 REFERENCES IN FILE CA (1967 TO DATE)

44 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

2262 REFERENCES IN FILE CAPLUS (1967 TO DATE)